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ABSTRACT

An evaluation was conducted of the fourth year of Project Future, implemented in the Bremerton (Washington) School District. The project objective was to provide pilot class students at four grade levels (grades 3, 6, 9, and 12) with career education learning experiences which used commercial and teacher created classroom activities and materials, and which provided opportunities for students to observe, interview, or assist workers in a variety of occupations. Evaluation of the fourth year included data from experimental pilot classes of 27 third, 47 sixth, 43 ninth, and 62 twelfth grade students, and from nonmatched control groups of 35 third, 56 sixth, 43 ninth, and 115 twelfth grade students. Pre- and posttest data were collected using the project-developed Career Education Inventory (CEI); an observational critique of videotapes was used to evaluate groups of students engaged in interpersonal communications exercises. Questionnaires were administered to secondary students, their parents, and cooperating community employers. Results of the CEI instruments showed pre- to posttest score increases significant at the .001 level (covariance analysis) for all four grade level experimental classes. Questionnaire results showed that most program elements were considered effective ways of learning by all three groups, with 75% of the responding parents, 76% of the responding students, and 77% of the responding employers rating the overall project activities at the top or next to the top on a five-point scale or the equivalent. (TA)

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ED147459

SHARING EDUCATIONAL SUCCESS

PROJECT FUTURE

BREMERTON SCHOOL DISTRICT 100-C
Bremerton, Washington 98310

Dr. Thornton M. Ford, Superintendent
Gerald F.J. Johnson, Project Director

U S DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
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Validation Report
prepared by

Gerald Johnson
May 7, 1976

CE 012 379

APPLICATION FOR VALIDATION

Directions: This form is used by the local educational agency as an application for validation of projects or practices for dissemination.

The form has five parts. (Complete all items under each part.)

Part I:	Information and Project Description
Part II:	Effectiveness/Success
Part III:	Resource Specifications
Part IV:	Exportability
Part V:	Certifications and Attachments of Supporting Documents

Your response to each item will be rated on-site by a team of validators if selected by the State for the Validation process. Be brief and specific in your responses. Give the best data available that directly address the question. The report must be summarized or vital data extracted and reported in the space provided in the form. Reports and other documents from which the evidence was extracted may be attached. (Suggestion: after the evidence is reported, do a self-rating of evidence. Are you satisfied with the scope and strength of the evidence provided? Does it adequately support your claim of project effectiveness and exportability? Are costs stated accurately?)

The description of the project, Part I, B, should be able to stand alone. All evidence must be contained in the description and should not require additional reference to other documents. It will be separated from the rest of the application form and used for project review. Finally, it may be used as part of a publication for dissemination.

Submit four copies of the application, including attached documents, to the State educational agency prior to the designated deadline.

PART I--Information and Project Description

Part I of this application can serve several purposes: (1) as the IVD project abstract and (2) as a report that may be submitted to the Dessimination Review Panel.

A. PROJECT INFORMATION

Area of concern Career Education
(e.g., Career Education, Handicapped, Reading, etc.)

Project Title Project Future

Project Director's Name Gerald Johnson

300 N. Montgomery	Bremerton	WA	98310
Address	City	State	Zip Code

Phone Number (include area code) 206-478-5140

Application Agency Bremerton School District 100-C

Location 300 N. Montgomery
(Street Address)

Bremerton	WA	98310
City	State	Zip Code

Superintendent's Name Dr. Thornton M. Ford

300 N. Montgomery	Bremerton	WA	98310
Address	City	State	Zip Code

Phone Number (include area code) 206-478-5105

Project Period: beginning June 15, 1972 (date); ending June 14, 1976 (date)

Expenditures

Grant Period	Federal Funds	Other Funds	Total Funds
6/15/72 to 6/14/73	$ 54,937	$	$ 54,937
6/15/73 to 6/14/74	$ 66,664	$	$ 66,664
6/15/74 to 6/14/75	$ 82,717	$	$ 82,717
6/14/75 to 6/14/76*	$ 37,525	$ 10,439	$ 47,964
*Grant Award TOTAL	$241,843	$ 10,439	$ 252,282

PART I--Information and Project Description (cont.)

B. BRIEF DESCRIPTION OF PROJECT:

Goals and objectives
Context: community, school, student characteristics
Program description: grade level(s), years of operation, sample size, curricula, materials, staffing, facilities, time involved, parental involvement, preservice/inservice training, etc.
Costs: total, per pupil, initial implementation, ongoing maintenance, etc.

C. EVIDENCE OF EFFECTIVENESS:

Summarize in appropriate detail the evaluation evidence for the effectiveness of the program or model in question. In order to be acceptable, the evaluation need not be a strict experimental design (i.e., longitudinal measures, random assignment to treatment and control groups, etc.), although this type of evaluation evidence would be the most desirable. However, in order for a project to be validated and recommended for wide scale adoption there must be some kind of high quality, objective, methodologically sound, quantitative assessment which demonstrates that the project in question is effective and superior to other more commonly used approaches or methods. Thus, in order to approve the dissemination of any projects, the Panel will require a detailed summary of the relevant evidence including such things as:

-who conducted the evaluation;

-sample sizes;

-improvements or gains in whatever outcome measures were employed;

-the statistical reliability and educational significance of these improvements;

-some evidence that the improvements can be attributed to the program and are not just "normal" or "natural" gains (i.e., control group or norm comparisons, or some estimate of what would have occurred in the absence of the program).

D. Evidence of Resource Specifications

Summarize in appropriate detail the evidence presented for start-up, operation and management resources and costs.

E. Evidence of Project Exportability

Summarize in appropriate detail the processes required for adoption of the project by another school district including material, equipment and staff training.

F. Locally Designed Publications and Materials

List locally developed publications and materials available for dissemination. Give title, description and cost.

G. Unanticipated Outcomes and Spinoff Finding

Summarize by listing of unanticipated outcomes and spinoff findings.

B. BRIEF DESCRIPTION OF PROJECT

1. GOALS AND OBJECTIVES.

Project Future was designed to meet student needs which were identified in a 1970 study of the District's 1965-70 high school students. The goal has been to provide instruction so that students can learn: a) about themselves, i.e. how to make decisions, plan for the future, and develop effective inter-personal communications; b) about the world of work, i.e. employment and changes due to social, economic, and technological forces; and c) how to select and prepare to enter a particular occupation. Such learning is expected to result in students acquiring the skills and attitudes which will enhance their personal occupational decision making and preparation.

The project's objective during the last two years has been:

To provide pilot class students in grades three, six, nine, and twelve with career education learning experiences which use commercial and teacher created classroom activities and materials, and which provide opportunities for students to observe, interview, or assist workers in a variety of occupations. Such learning will result in:

a) Increased knowledge, skills, and understanding related to future personal involvement in the world of work as demonstrated by statistically significant increases in pre- to post-test scores at the .05 level for fourth year pilot class students using a project-designed test instrument;

b) Increased skills in inter-personal communications for grade six, nine, and twelve pilot class students as demonstrated by statistically significant increases in pre- to post-test scores at .05 level for a randomly selected group of six students from each third year pilot class, the scores to be determined by trained observers who will critique videotaped small group communication exercises.

2. CONTEXT

Community

The Bremerton School District, serving the City of Bremerton and small adjacent portions of Kitsap County, has a K-12 program for approximately 6900 students. The District is located on the western shores of Puget Sound, and provides education for many students of personnel stationed or employed at the Puget Sound Naval Shipyard and at several other nearby Naval installations. Currently, the community is relatively stable economically, with lower middle income level residents predominating the population. Like many districts in the state, Bremerton has had mixed success in maintaining financial support for its schools and has in the past functioned without adequate funds due to failure to pass a special levy.

Schools and Classes

In this, the fourth year of Project Future classes, evaluation data were collected during the school year from students in the third and sixth grades at Marion Elementary School and in two ninth and two twelfth grade classes during the first semester. This parallels the student groupings used for data collection during the third year.

This year's district-operated career education program also included Marion students at other elementary grade levels, as well as two seventh and two eighth grade classes, and a ninth and twelfth grade second semester class at each high school. However, data for validation purposes were not collected from these classes. During the third year, for which some data is reported herein, the project had pilot classes which included all third and sixth grade students in Marion Elementary School, three second semester ninth grade classes, and two twelfth grade pilot classes each semester.

In both the third and fourth years, students who would attend either District high school in September were eligible for the summer Work Intern Program. The majority of those participating were ninth grade pupils.

Student characteristics

For Marion Elementary School at large, the student body is characterized as being 30% disadvantaged, having slightly more than 10% of the students from minority groups, and having a mean average intelligence quotient of 95.8 for students in grades four, five, and six. These figures are assumed to reflect the make-up of classes at all grade levels at that school.

At the secondary level, grades nine and twelve students chose to take the one-semester project classes for elective credit. These included a random mix of students whose only common characteristic may have been that they were all seeking help in making post-high school or occupational decisions.

3. PROGRAM DESCRIPTION

Grade Levels and Years of Operation

The project was designed to focus on four grades during each of the three grant-supported years, thus covering all twelve grade levels. Having started with pilot classes in grades one, four, seven, and ten, and moving up one grade at each level in the second year, the third year was concerned with pilot classes in grades three, six, nine, and twelve.

During this, the fourth year, the District has funded the continuation of the program as it existed in the third year, with the addition of five high school classes. A small Title III grant supported the design of curriculum-related test instruments, the collection of data evaluation, and the validation process.

Pilot Class Size

Tables Ia and Ib summarize the organization of the third and fourth year pilot classes, respectively and the numbers of students in each.

Table Ia Third Year Pilot class enrollments by grades and times.

GRADE	Sept.-June	First Semester	Second Semester	Summer WIP only*
3	38			
6	37			
9			63	60
(10)*				15
(11)*				8
12		27		8

Table Ib Fourth Year Pilot class enrollments by grades and times.

GRADE	Sept.-June	First Semester	Second Semester	Summer WIP only*
3	27			
6	47			
9		43	53	34
(10)*				15
(11)*				7
12		68	59	12

Curriculum

Teachers were encouraged to develop their own lessons for meeting the objectives of the project at each grade level. Special units developed by the project staff were also taught. Commercial materials were used selectively, sometimes on a trial basis. A curriculum sequence was followed which included the following areas:

1. Self-awareness, personal decision-making, inter-personal oral communications.
2. What "work" is and is not.
3. How change (as a process) affects the world of work and the individual.
4. The economic setting for work.
5. Information about occupations.
6. Observing workers.
7. Work experience (Internships).
8. Career decision-making.
9. Career planning.

Materials

During the first three years of the project, a variety of commercially prepared materials were acquired. Those which have been most effective for grades, three, six, nine, and twelve are included below:

a) Elementary:

Career Awareness - Westinghouse Learning Corp.
Developing Understanding of Self and Others (DUSO) - Guidance Associates
Economics in the Home, School, and Community - Aimes Instructional Media Services, Inc.
Focus on Self Development - SRA
Handbook of Job Facts - SRA
Occupational Outlook Handbook 1974-5 - U.S. Government Printing Office
Our Economy - Westinghouse Learning Corp.
Seattle Post-Intelligencer (Daily newspaper) - Newspaper In The Classroom Program
Secrets - Educational Progress Corporation
The Jelly Bean Company - BFA Educational Media
The Valuing Approach to Career Education - Education Achievement Corporation.
Widening Occupational Roles Kit (WORK) - SRA
Assorted elementary library books
Assorted 16 mm films and film strips

2. Junior and Senior High School
   Career Games - Educational Progress Corporation
   Career World - Curriculum Innovations, Inc.
   Dictionary of Occupational Titles - U.S. Govt. Printing Office
   Job Finding Kit - Employment Security Dept., State of Washington
   Life Career (game) - Western Publishing Co.
   Making Value Judgments (textbook) - Charles E. Merrill Pub. Co.
   Manpower and Economic Education (textbook) - Love Pub. Co.
   Maturity: Growing Up Strong - (textbook) - Scholastic Book Services
   Occupational Outlook Handbook 1974-5 - Govt. Printing Office
   Assorted 16 mm films and film strips
   Assorted occupational briefs, pamphlets, booklets, etc.

Teachers produced learning materials which were used independently of commercially produced materials. Also, systems and related materials for operating various programs were developed by the project staff.

Staffing

Project staffing for the first two years consisted of the director, a secretary, and two part-time teacher aides. In the third year a second professional was added to assist in data collection and materials development. Two additional part-time teacher aides were added. Pilot class teachers were those who volunteered or who were assigned to the classes, and no special selection criteria were used.

Facilities and Time Involved

No special school facilities were required. Use of actual work sites in the community supplemented the schools' resources. Third grade students averaged an estimated hour and a half per week and sixth grade students averaged three hours per week of classroom project activity. This time was fluid, as the content was frequently integrated with the other subject matter. The ninth and twelfth grade classes were held for one fifty-minute period each day of the semester.

Teacher Preparation

Summer workshops were held before the second and third project years to aid teachers in preparing for their pilot classes. Occasional planning sessions were also held during the school years. Several classes were scheduled during each year in the district to provide project teachers with graduate courses in teaching economics and interpersonal communications.

4. COSTS

Table IA Project FUTURE Total and Per Pupil Costs as Calculated by Program Units for the Third Year.

Units	Number of Students (FTE)	Costs - Total/Per Pupil			
		Start-up	Management	Operational	Total
Primary	90	$2,685/29.83		$1,625/18.06	$4,310/47.89
Intermediate	90	3,115/34.61	$107/1.19	1,757/19.52	4,979/55.32
Secondary	180	3,661/20.34	213/1.18	4,197/23.32	8,071/44.84
Work Intern Program	150			4,850/32.33	4,850/32.33

C. EVIDENCE OF EFFECTIVENESS

Evaluation of the project's fourth year included data from experimental pilot classes of 27 third, 47 sixth, 43 ninth, and 62 twelfth grade students, and from non-matched control groups of 35 third, 56 sixth, 43 ninth and 115 twelfth grade students. Data were collected by using the project developed Career Education Inventory, Level A with third grade, Level B with sixth grade, and Level C with ninth and twelfth grades. An observational critique of video tapes was used to evaluate groups of six students who were engaged in interpersonal communications exercises. All testing included pre and post measures of experimental and control groups.

Data were collected and partially processed by project staff and cooperating teachers. Processing was completed by computers at the University of Washington Bureau of Testing Office.

Statistical analysis was completed by a consultant and data were recorded for this report by him and by the project director. Data interpretation utilized a formula for the analysis of co-variance.

Using the analysis of co-variance, results of the Career Education Inventory instruments showed pre-to post-test score increases which were significant at the .001 level for all third, sixth, ninth and twelfth grade experimental classes.

Using the analysis of co-variance, the results of the Interpersonal Communications skills critique were significant for the experimental groups at the .05 level for two of the seven components, at the .01 level for one component, and at the .001 level for three components. Only one component did not show data which were significant at the .05 level.

Other data which indicate the educational importance of the project include questionnaires in which secondary students, their parents, and cooperating community employers have indicated their reactions to various elements of the project. The results showed that most program elements were considered to be effective ways of learning by all three groups, with 79 percent of the responding parents, 76 percent of the responding students, and 77 percent of the responding employers rating the overall project activities at the top or next to the top on a five point scale or the equivalent.

Data which include the writings of respected career educational specialists, other educators, and social scientists, as well as state and national guidelines for career education, suggest that the program components which have been developed by this project are timely and effective in providing students with the knowledge and skills to make career decisions. Interest shown by more than one hundred teachers and administrators indicates the value which they place upon the content and approaches of this project.

D. EVIDENCE OF RESOURCE SPECIFICATIONS

Start-up, management, and operational costs have been compiled for a minimum program for thirty students at each of grades one through twelve. Startup costs include forty hours inservice training for one principal and twelve teachers, consultants' time for inservice activities, library books, classroom materials, textbooks, and other media for the instructional program, and a small amount of audio-visual equipment. Management costs cover only a small amount of consultant time for classroom follow-up of inservice training. Operational costs include teacher aide salaries, pupil transportation expenses, telephone, summer program supervising teacher's salary and travel, and consumable materials and postage expenditures.

All costs are shown by the instructional units of Primary, Intermediate, Secondary, and Summer Work Intern Program. Expenditures are listed for starting a new program and are based upon the assumption that regular school equipment and teacher time are available at no additional costs. If school districts would have on hand any of the resources which were specified, these would not have to be duplicated, thus reducing the cost for an adopting district.

E. EVIDENCE OF PROJECT EXPORTABILITY

The project operated at three grade levels, Primary, Intermediate and Secondary. A fourth unit, the Summer Work Intern Program included high school students from all grades. Therefore, it is possible to adopt the project in its entirety, by unit, or even by grade. The most important factor in determining the probable success of the project when adopted, is the interest and commitment of the teachers and administrators to the concept of career education.

Many schools have some or all of the materials and other resources recommended for use in starting the program. There is no need for duplication. Selection of materials to be purchased may vary as new items are becoming available continuously. Project-designed lesson plans are available for Primary, Intermediate, and Secondary levels and may be used as prepared or adapted by interested teachers. See Section F for a further description of these materials.

Teacher inservice workshop participation should precede program implementation. Teachers should examine the essential concepts for students to acquire in a career education program and determine which of these are already being developed through existing programs. By building on these, the best utilization will be made of existing resources, and those areas in which students are not being helped should receive attention. Teachers' background in some of the essential areas of learning in career education needs to be strengthened and special training in the basic economic principles relating to the world of work, as well as preparation to deal with the topic of interpersonal relationships and communications, should be provided.

F. LOCALLY DESIGNED PUBLICATIONS AND MATERIALS

Teachers in the project for four years have developed 234 lesson plans for the various units or levels. Known as Project FUTURE, Career Education Activities, these have been reproduced and are available unbound by unit level at a cost of two dollars. Most lessons may be adapted to fit special teaching situations.

Some lessons have adapted commercially prepared materials for new uses, while other lessons are completely teacher developed. Teachers were encouraged to try new ideas in their classroom activities, and their notes concerning successes and problems are included. The nine-lesson Interpersonal Communications instructional program developed by the project is also available at a cost of one dollar.

Additional materials which describe the project are available upon request. These include a nine-minute slide/tape presentation, brochures outlining the entire program, and other materials which provide details about specific components such as the Work Intern Program and the Occupational Observation Experiences.

G. UNANTICIPATED OUTCOMES AND SPINOFF FINDINGS

1. The development and use of a data collection instrument which is related directly to the curriculum permitted a precise measure of the results of the project's instructional program. When used in a pre- post-test manner with experimental and control classes, the results of the project's instructional program were readily seen.

2. The success of the nine-lesson program for teaching Interpersonal Communications was greater than expected. Most of the skills were understood well by students and, as they practiced them, many students appeared to apply them as part of their interaction. Likewise, the system of collecting skill application data by having trained observers rate video taped small group exercises, may have been a breakthrough in using objective assessment techniques to gather data about informal human behavior.

3. The community support for this project has been overwhelming. Employers and workers have been very willing to share their work with interested young people, and very few have refused. Parental support and student interest have grown steadily. This has had positive results for the entire school system.

4. Teacher cooperation has been considerable. Most teachers have enthusiastically supported the project's activities, without particular reward other than personal and professional satisfaction. In several cases, teachers stated that the project content and activities had helped them become more effective and better informed teachers.

5. The importance of the project as a model for area, regional, and state use has been unexpected. Summer inservice courses at a college and university in the eastern and western sections of the state were designed around the project's activities. The project has been displayed and described at numerous regional and state conferences. Finally, the project has had much visibility for teachers through project-operated inservice courses in Economic and Career Education, and in the teaching of Interpersonal Communications.

Section H

1. Conclusions and recommendations of team members including minority report (attach additional sheets as needed):

Conclusions:

The Validation Team unanimously agrees that Project Future as planned and implemented in the Bremerton School District of Bremerton, Washington, has educationally valid components consistent with good practice in what has become known as "Career Education." We further find that students, educators, board members, parents and community members associated with the project enthusiastically endorse the programs.

The statistical evidence of program effectiveness being present for National Validation, the team, again unanimously, concludes that they validate the project for National Dissemination.

Recommendations:

The Validation Team members believe the career education program, Project Future to be educationally sound and that it should be continued in the Bremerton District. We also strongly urge that other schools facing the need to provide students with career education be given opportunities, as appropriate, to learn about this project.

2. Innovativeness of the project.

There were a number of innovative aspects to Project Future, among them were:

a. *The summer internship components. This part of the program meets the needs for exploration of careers and students learning what work is all about in a manner within the team's experience.*

b. *The interpersonal communcations element. This portion of the program is utilized from grade 6 through 12. It's conclusion stems from the recognition that "getting along with self and others" is a necessary prerequisite to success at work.*

c. *One day observations and small group field trips. Again, these components are most unusual and effectively meet the need for young people to begin discriminating regarding career roles, choices and gaining knowledge about work.*

d. *Systematic development of teaching materials. Guidelines are utilized to present curriculum in appropriate scope and sequence, while giving teachers latitude and encouragement to develop their own materials to meet objectives.*

PART II--Effectiveness/Success

> Project objective(s) identified for validation have been attained and the performance of the learner has been improved.

Directions: Evidence on effectiveness/success is to be reported by objective. Part II has 15 items. Respond to all 15 items for each nominated objective. You will need as many sets of Part II blank forms as you have objectives.

Only major objectives should be presented for validation. List these objectives below. Number consecutively. The handbook contains only one set of forms. Reproduce as many sets of forms as you need.

A major objective represents a central or primary goal of the project which will be reflected in the amount of effort, project staff time, funds expended and anticipated behavior outcome. Ordinarily the major objectives will be limited to two or three for each project and will reflect student learner outcomes.

PART II--Effectiveness/Success (cont.)

Objective No. 1

1. State each major objective to be validated on a separate set of Part II, Effectiveness/Success, forms. Number each objective for identification. From here on, identify the objective by its assigned number. You will need as many sets of Part II forms as there are objectives to be validated.

   Objectives should be stated in measurable terms reflecting who, upon completion of the project intervention (treatment), will be able to do what at what level of performance. Any objective not meeting the necessary specifications of measurability will be eliminated from further review, investigation and validation.

State Objective:

To provide pilot class students in grades three, six, nine, and twelve with career education learning experiences which use commercial and teacher created classroom activities and materials, and which provide opportunities for students to observe, interview, or assist workers in a variety of occupations. Such learning will result in:

a) Increased knoweldge, skills, and understanding related to future personal involvement in the world of work as demonstrated by statistically significant increases in pre- to post-test scores at the .05 level for forth year pilot class students using a project-designed test instrument;

b) Increased skills in inter-personal communications for grade six, nine, and twelve pilot class students as demonstrated by statistically significant increases in pre- to post-test scores at .05 level for a randomly selected group of six students from each third year pilot class, the scores to be determined by trained observers who will critique videotaped small group communication exercises.

PART II--Effectiveness/Success (cont.)

Objective No. 1

2. Provide evidence to justify the need for the objective under consideration by describing the needs assessment procedures and the related findings.

A direct relationship should exist between the identified needs and the anticipated behaviorial change defined by the major project objectives.

Description of needs assessment and findings:

The needs assessment procedures which resulted in this project grew from a study by District professionals, students, and community members of national, state and local priorities and the degree to which these were being met in the District. National needs were identified from the writings of Torrance, Toffler, McDavid and Harari, Hall, and O'Leary, Smuck and Runkel, and others who were analyzing the problems of youth in the late 1960's and early '70's. State needs were identified in Phase II: An Assessment of Education Needs for Students in Washington State. District studies from which local needs were identified are quoted below:

1. Bremerton School District Opinion Poll Community Survey, May, 1972 (Excerpts)
   a) In response to the statement "The study of vocations and career awareness should begin as early as elementary school", there was agreement by 63% of the community, 74% of the elementary staff, 79% of the junior high school staff, and 71% of the high school staff. (Table 25, p.28)

   b) In response to the statement "Bremerton students should be provided learning experiences which take students into the community" there was agreement by 74% of the community, 92%, 69%, and 88% of the respective staffs of elementary, junior high, and high schools. (Table 39, p.42)

   c) Three statements which related to the degree of effectiveness of the Bremerton schools in preparing students for post-high school activity (college, business or vocational schools, a job), had general responses from the community which were less than 40% positive. Staff members at all three levels also felt less than 50% positive on these questions, except for the junior and senior high school staffs in relation to preparation for college. (Tables 53, 54, p.56, 57, 58)

2. A Community Study of Parental Attitudes Toward Bremerton Schools, Summer, 1970

   a) Career Counseling is viewed as inadequate by a majority of respondents from each high school, particularly by those from East High (66.7%). (p.12 - Analysis of Questionnaire Items)

   b) 95.1% of all respondents classified Career Training as important. (p.12 - Analysis of Questionnaire Items)

3. Five Year Districtwide Plan for Vocational Education, March 1, 1970

   a) "Because one of the needs of industry and business today is for people who can get along with others on the job, there is a need to develop a pre-vocational human relations training program for students." (Unmet needs, p.8)

   b) "Because many of our students do not know the job opportunities available to them, there is a need to develop an introduction to work opportunities programs prior to grade 9." (Unmet needs p.8)

4. Junior/Senior Questionnaire, Project Future, Fall, 1973

   89.3 % of all junior and senior students felt that there should be "a high school course for Juniors and Seniors which would help them to make decisions about their careers". (Table E)

PART II--Effectiveness/Success (cont.)

Objective No. 1

3. Briefly describe the intervention process for this objective including where appropriate the following elements; grade level(s), number of participants, period of operation, curricula, special materials, staffing, facilities, scheduling patterns, parental community involvement, pre-service/inservice training, etc.

Describe activities for the attainment of the objective:

Students in grades three and six at Marion Elementary School constituted the membership of the elementary level pilot classes. Specific forty-five minute lessons were scheduled twice each week for the third grade and four times weekly for the sixth grade classes during most of the school year between the periods of pre- and post-testing.

Grade nine and twelve students in both high schools consisted of those who enrolled in specially designated project classes which met daily for one period during a semester.

Work Intern Program students included those who would be in grades 9 through 12 during this school year and who applied for participation. The content of their work experience depended upon their individual placement in the summer program.

Teachers who were assigned to these classes participated in summer and school year workshops where they prepared learning units utilizing available commercial and teacher-prepared materials. Elementary teachers followed the concepts for their grade levels which are contained in the National Standard Career Education Model. At the secondary levels, teachers designed specific instructional activities to meet the project's goal.

The major instructional elements of the project and the degree of emphasis given to each at various grade levels are listed in Table II.

Table II. Instructional Elements and Levels of Emphasis in Project Future, Third Year

	ELEMENTS	EMPHASIS (x=introduced xx=moderate xxx=extensive) Grade 3	6	9	12
1.	a) Self-Awareness, b) Personal Decision Making, c) Interpersonal Communications *Who am I? What would I like to become? What are my strengths, interests, limitations? What are my values? How do I make good decisions about myself? How do I get along with other people and how do they see me?*	xxx x	xxx xx xxx	xxx xx xxx	xx xx xxx
2.	What is WORK? *Defining jobs, occupations, careers; examining the employment "system", including unemployment, self-employment, employee-employer relations.*	x	xx	xxx	xx
3.	Change: A Process *How various kinds and forms of change and the rate of change (social, economic, technological, maturational, legislative) affect the world of work and the individual. How to anticipate and meet problems related to change.*	xx	xx	xxx	x
4.	Economic Setting for Work *How work and personal, local, regional, and national economic well-being are interrelated. How the market (economic) system functions. Why labor is a major element.*	x	xx	xxx	xx
5.	Occupational Information *How data about jobs are organized. How to find and interpret information. How to use data in career decision making and planning.*	x	xx	xxx	xx
6.	Occupational Observation *How to learn about work by observing a person on the job either one- to -one, in small groups, or in class groups; also includes having workers into classrooms.*	x	x	xxx	xxx
7.	Work Experience (Internships) *Provides short-term on-the-job experience, with or without pay, with school supervision. Placement is according to student's interest, and school credit is earned.*			xxx	xx
8.	Career Decision Making *How to examine personal interests and organize occupational alternatives. How to examine costs and benefits.*		x	xx	xxx
9.	Career Planning *How to lay out a step-by-step strategy to enter a particular field. (e.g. course selection, preparing a résumé, interview techniques, etc.)*			xx	xxx

Elements six and seven, above had special community involvement. Students were released from school in order to spend a full work shift observing a worker at a job in which the student had expressed an interest. Each student made several different observations in order to compare data collected about each occupation. Emphasis was placed upon the process of gathering data for personal occupational decision making. The summer Work Intern Program had students spending three weeks working at an assigned job in a field in which the student had indicated an interest. Both activities involved considerable community participation in providing observational and working opportunities.

Inservice training and planning for this year emphasized the development of formalized curriculum plans. Teachers spent forty hours during the 1974 summer and varying amounts of time during the current school year in preparing to work with their students. Project staff and consultants assisted the teachers by providing background information and experiences for them and by helping them to develop classroom activities. Formalized inservice courses were also offered locally so that teachers could receive instruction which would help to meet project goals. Details of the workshops and courses are available from the project.

PART II--Effectiveness/Success (cont.)

Objective No. 1

4(a). Provide the evaluation design (pre-post test, baseline data, post test only, experimental control, etc.,) which, when implemented, will provide the information necessary to determine to what extent the objective was actually attained.

Describe evaluation design:

Data for the fourth year were collected by utilizing a locally developed career education inventory which was given to grades 3,6, 9 and 12, both experimental and control groups for each grade, on a pre- and post-test basis. Form A of the career education inventory containing forty-five items was administered to both experimental and control third grade groups. Form B of the inventory containing fifty-six items was given to the sixth grade experimental and control groups and Form C containing fifty-three items was given to ninth and twelfth grade students. Table III below summarizes an application of the three forms of the career education inventory to the respective grades and groups.

Table III Application of Evaluation Instruments to Fourth Year Classes

GRADE	GROUP	CAREER EDUCATION INVENTORY
3	Exp. Control	Form A - Pre/Post Form A - Pre/Post
6	Exp. Control	Form B - Pre/Post Form B - Pre/Post
9	Exp. Control	Form C - Pre/Post Form C - Pre/Post
12	Exp. Control	Form C - Pre/Post Form C - Pre/Post

Application
for Validation

PART II--Effectiveness/Success (cont.)

Objective No. 1

4(b). For the objective under consideration, describe data collection procedures specifying type of data collected, method of data collection, timelines, responsible persons, etc., Chart format is suggested.

Describe the data collection procedures:

Table IV describes the dates on which the career education inventory was given to each of the grades and both control and experimental groups. Data on third and sixth grade students were obtained shortly after the beginning and near the end of the school year. Data on the ninth and twelfth grade students were obtained at the beginning and end of the first semester, since these are one-semester courses.

Table IV Testing Schedule for Career Education Inventory

GRADE	Dates				Administered by
	Pre		Post		
	Exper.	Control	Exper.	Control	
3	11/3/75	11/3/75	4/20/76	4/15/76	E. Haupt and classroom teacher
6	10/20/75	10/20/75	4/19/76	4/13-14/76	E. Haupt and classroom teacher
9	9/8/75	9/8/75	1/26/76	1/26/76	E. Haupt and classroom teacher
12	9/8/75	9/8/75	1/26/76	1/26/76	E. Haupt and clasroom teacher

PART II--Effectiveness/Success (cont.)

Objective No. 1

4(c). If evaluation information was collected on a sampling of the project's participants, describe sampling technique. Give sampling size and evidence of representativeness.

If sampling procedure was not used, write "Not Applicable" (NA) below.

Describe sampling technique:

The experimental group students at each of the four grade levels who were in attendance at the time of both pre- and post-testing constituted the sample for the Career Education Inventory. In total and at each level, this included almost every student who had participated in the pilot class programs during the full time period for each grade.

There are the following members of students included in the data analysis for the experimental groups: grade three - 22; grade six - 41; grade nine - 36; and grade twelve - 53.

For the video taping, three boys and three girls were chosen at random from each experimental class, and are assumed to be representative of the total class.

PART II--Effectiveness/Success (cont.)

Objective No. 1

4(d). Provide supporting evidence that the attainment of the objective can be attributed to the project intervention (treatment) activities.

Describe evidence of effectiveness:

A. Career Education Inventory

For each of the four grades included in the project (third, sixth, ninth and twelfth) the experimental design called for the establishment of experimental groups which received the treatment in terms of the project intervention of activities described in Section 3 of this application. In addition, a group of control students were selected for each of the respective grades. These control groups did not receive any Project Future instruction and thus meet the definition of a control group. Both the experimental and control groups at each of the grade levels were given the Career Education Inventory. For the third and sixth grade students all pre-testing was done shortly after the beginning of the school year. In the case of the ninth and twelfth grade students, the pre-testing was done at the beginning of the first semester.

Subsequently, in each grade for both experimental and control groups, a post-testing with the same instrument was administered. For the third and sixth grade students, this was completed in April. For the ninth and twelfth grade students, the post-testing was completed at the end of the first semester in January.

As a result of the experimental design established for each of the grades for the dependent measure as accomplished with the Career Education Inventory, since treatment was given to students in experimental classes and no specific career awareness activities took place in the control groups, it can be assumed that any increase in performance on the Career Education Inventory over and above any changes found among the control groups of students can legitimately be inferred to have been caused by Project Future intervention.

In addition to the experimental design which allows for inference of treatment effects, the statistical analysis used also allows for observation of specific treatment effects. The analysis of co-variance, which is a statistical technique used in the analysis of the results of this project, simply tests the significance of differences between the control and experimental groups after any initial differences occurring on the pre-testing have been statistically eliminated. The advantage of this analysis is that if there were by chance any initial differences in the performance of the control and experimental groups for any one grade level, these differences can be eliminated statistically.

B. Interpersonal Communications

The same type of design and analysis as described above for the Career Education Inventory was also used for the interpersonal communications component of the project. Both control and experimental groups of students were established for the sixth, ninth, and twelfth grades, with the experimental students receiving specific instruction in interpersonal communication skills, while the control groups did not receive such treatment within their classes. An analysis of co-variance was also used to determine if, on any of the aspects of the communication observation procedure, any students in the experimental group made any significant change when compared to a similar grade grouping of control students. Because of the experimental control design and the type of statistical analysis, any significant change found in the experimental groups can be assumed to have been a product of Project Future intervention.

PART II--Effectiveness/Success (cont.)

Objective No. 1

4(e). Where control groups exist, describe how they were selected and give some indication of their equivalency to the project group.

If control groups were not used, write "not applicable" (NA) below.

Describe procedure, give evidence of equivalency:

Control groups for grades three and six included all students in those grades at Navy Yard City Elementary School, the students of which have been determined by Title I study standards to be closest socio-economically to Marion Elementary School students. There were 34 third grade and 55 sixth grade students in these control classes.

Control groups for grades nine and twelve were selected at both high schools, as complete classes in the social studies and English departments. As these are classes into which students selected themselves, it is assumed that they are heterogenously structured for intelligence, sex, and all other variables, and that they are generally representative of the schools' total ninth and twelfth grade population. There were 91 ninth grade and 95 twelfth grade students in these control groups.

For the video taping, control group samples included three boys and three girls who were selected from classes which had no Project Future activities in the past, and who are assumed to be representative of the student population at each of grades six, nine, and twelve in the school district.

PART II--Effectiveness/Success (cont.)

Objective No. 1

4(f) Identify and describe each instrument utilized in the evaluation. Instruments can be standardized or locally developed tests, questionnaires, interview forms, rating forms, inventories, etc. Include information concerning the instrument's validity, reliability, and sensitivity to measure the range, scope, and nature of the behavior measured.

Identify and describe instrument:

The Career Education Inventory was developed by the project evaluator and district administrative and teaching staff. Form A of the Inventory containing forty-five items was given to the third grade students. Form B containing fifty-six items was given to sixth grade students and Form C containing fifty-three items was given to both ninth and twelfth grade students.

A. INSTRUMENT VALIDITY

The process for development of the instrument proceeded as follows: Prior to and during the initial weeks of the fall 1975-76 school year the Project Future instructional staff and administrators presented the project evaluator with a comprehensive listing of a Career Education Objectives which each of the teachers expected to address themselves to cover the course of the school year or semester. The project evaluator then met with the staff to make sure he understood the meaning of the objectives and the exact content to be included.

The first was whether the test item dealt with information that teachers' planned to teach, and secondly, did the test item seem clear appropriate for the student for whom it was targeted. Following the inspection of the items by the teaching staff, a final copy of the Inventory was prepared by district personnel.

Because of the continuous and frequent involvement of the teaching staff in the preparation of the evaluation instrument and because the items were drawn directly from the content which teachers expected to teach, it is felt that all forms of the career education inventory are high in content validity.

B. RELIABILITY

A Kuder-Richardson Formula 20 analysis was applied to both experimental and control groups for each of the 3, 6, 9 and 12th grade classes on both the pre- and post-test analysis. The internal reliability coefficients obtained for the pre-test administration of the inventory ranged from a low of .70 for the ninth grade experimental class to a high of .87 for the sixth grade control group. A complete description of the reliability coefficients for each of the grades and groups is contained in Table V found in this section. This table contains both pre- and post-test reliability coefficients.

Since .70 or .75 level of reliability coefficient is deemed an adequate measure of reliability it is felt that this locally devised career education inventory can be judged to have very adequate internal reliability based upon the data shown.

The Inventory includes, regardless of its form, three sections corresponding to course content objectives. The first section is that of self and career awareness including objectives and information relative to personal values, decision making, personal interests and their relationship to jobs. The second section is knowledge of occupations including information on job or occupational resources and information, the organization in relationship of occupations, the job seeking process, career planning, and skill requirement of jobs. The third section dealt with the area of work included definitions of work, the economic setting of work, and changes in the world of work.

Having available all course syllabi, specimen copies of resources and textbooks, the project evaluator then prepared draft copy of test items in multiple choice format endeavoring to cover relatively equally all aspects of the course content. A general analysis of the sampling of test items in terms of levels of learning indicated that slightly over one third of the questions were knowledge, slightly less than one-third of the original questions were in the area of comprehension, the same number of items dealt with application of information, and a smaller number of questions tapped the analysis level of knowledge or learning. Thus, although synthesis and evaluation levels are not included since these items are very difficult to place in multiple choice format, a fairly reasonable balance of the levels of learning seem to be included in the Inventory.

Subsequent to the preparation of the first draft of each form of the test, a teaching staff then was given the opportunity to review, critique, and evaluate the entire inventory, keeping two major criteria in mind.

4 (f)

Table V Kuder-Richardson Formula 20 internal reliability coefficients

Grade	N	Pre-test	Post-test	N
3				
Experimental	27	.86	.88	22
Control	35	.75	.75	34
6				
Experimental	47	.84	.90	41
Control	56	.87	.88	54
9				
Experimental	43	.70	.80	36
Control	131	.74	.78	105
12				
Experimental	62	.77	.85	52
Control	115	.79	.81	95

PART II--Effectiveness/Success (cont.)

Objective No. 1

4(g). Give evidence that persons responsible for data collection (administration of tests, inventories, attitude scales, etc.) were qualified for their tasks. If any instrument utilized required special training or procedures, so indicate.

State qualifications and special training

1. The project director, Mr. Johnson, was responsible for the overall evaluation design and its implementation. His training includes formal courses in Tests and Measurement, Educational Psychology, and Introductory Statistics in his undergraduate and graduate degree of programs. He has been involved in the implementation and evaluation of innovative educational practices for eleven years.

2. A new project facilitator, Mrs. Haupt, was employed for the fourth year. Her background includes university preparation as a teacher and experience with the project as a full-time aide during the second half of the first year. Mrs. Haupt has an excellent background in curriculum development for career education and worked with the teachers in the design of all forms of the Career Education Inventory.

3. The third year's project facilitator, Mrs. Cook, worked under the director's supervision in critiquing video tapes. Her experience of a year and a half with the project, plus five years of teaching, gives her a background sufficient to be involved in the evaluation activities.

4. Dr. Grant Martin, the evauation consultant to the project, holds a Phd. in Educational Psychology. His major area of study was Learning, and his background in psychological measurement and evaluation includes seven years experience as a program or project evaluator.

5. The second rater of the video tapes, Mrs. Brewer, was associated with the project during the first two years as an observer for critiquing interpersonal communications behavior similar to that which was included in the project's evaluation.

6. Five experienced teachers who assisted with the Career Education Inventory administration in their classes were supervised by the project staff and had all the instructions for giving the test.

PART II--Effectiveness/Success (cont.)

Objective No. 1

4(h) Describe data verification procedures used to assure the accuracy of data for each objective. The descriptions should include the nature of and degree to which data verification procedures were used to detect and correct errors in data management.

Describe the procedures:

Responses by all third grade students were transferred from the test booklets to optical scan answer sheets for local computer processing. This procedure was triple-checked for accuracy. Post-test scores for grades three and six students in control and experimental classes were scored manually and triple-checked, this being necessitated by a mechanical breakdown of the scoring equipment at the local computer center.

Responses by students in all other classes were given by marking the optical scan sheets. These were checked by Project Future staff to assure completion of all identification data and to prepare the material for machine scoring.

Only Career Education Inventory for students who had both pre- and post-test scores were submitted for final analysis.

Interpersonal communications observations were manually listed by the observers. Data were transferred to optical scan sheets and double-checked for accuracy.

After all test data had been verified by district staff, it was forwarded to Dr. Martin, the Project Evaluator, in the form of University of Washington optical-scan sheets. These sheets were then processed by the University of Washington Bureau of Testing. A complete printout of individual and group scores for each grade and each group for both pre- and post-testing was obtained. A variety of statistical descriptions were obtained from the testing bureau scoring procedures, including the measures of internal reliability previously discussed.

PART II--Effectiveness/Success (cont.)

Objective No. 1

4(i) Report the data analysis procedure(s) used in data treatment and interpretation. Include names of persons or agencies responsible for data analysis.

Describe procedures:

1. Interpersonal Communications Data

Analysis Procedures

After observations were recorded, data were manually processed before being transferred to optical scan sheets for machine processing. Several manual procedures were followed with various data segments as follows:

a. For each of the categories (a) Positive Non-Verbal, (b) Group Process Facilitation, (c) Negative Non-Verbal, (d) Group Process Deterrents, (e) One-Way Statements and (f) Confusion, the data were recorded for each student in each group as the sum of the ratings in each category, divided by the number of minutes for the observation. (This provides a rate per minute). Thus, if a student was observed making six contributions in a particular category during a ten minute period, his listed rate would be .6 for that category (6 ÷ 10 minutes = .6/minute).

b. For the category, Total Participation, data were recorded for each student in each group as the difference between 1.0 and the sum of the ratings in each category, divided by the per minute mean of all contributions for the six students in the group. Thus the formula would read: 1.0 - (f ÷ average contributions) = recorded score, e.g. Student A's contributions (f) = 25; total of six students' contributions = 88; recorded data would be computed as $1.0 - (25 \div \frac{88}{6}) = 1.0 - \frac{25}{14.67} = 1.0 - 1.7 = .7$.

The rationale for Section b) above is that it is desirable for all students to share equally in the group's communications. This would show as 1.0 for each student in a group according to the formula; thus scores are shown as deviation measures on either side of 1.0.

In terms of the goal of the communications training, improvement in the interpersonal communications is reflected in pre- to post-test processed score increases in the categories Positive Non-Verbal and Group Process Facilitation, and pre- to post-test score decreases in all other categories.

Index of Inter-rater Agreement

The two observers independently rated a ten minute video taped segment of the interpersonal communications exercise used as a post-test. Their individual counts and their percentage of agreement on each category are shown below.

Table VI Index of Inter-rater Agreement on Interpersonal Communications Critique

Categories	Count by Raters #1	Count by Raters #2	Percentage of Agreement
1. Positive Non-verbal	17	17	100
2. Negative Non-verbal	0	1	0
3. Confusion	2	2	100
4. One-way statements	0	0	100
5. Group process facilitation	15	16	93.75
6. Group process deterrents	1	2	50.
7. Student A participation	15	17	88.24
8. Student B participation	11	12	91.67
9. Student C participation	29	31	93.55
10. Student D participation	1	1	100
11. Student E participation	28	23	82.14
12. Student F participation	19	20	95.
Mean average % Agreement			82.86
Median average % Agreement			93.65

It may be useful to note that the raters' observations for number two category were 0 and 1 which results in zero percentage of agreement. Excluding this category in calculating the mean percentage of agreement results in 90.40 instead of 82.86.

It is concluded that the index of inter-rater agreement is acceptable for the purposes of this study.

2. Career Education Inventory

Dr. Martin, Project Evaluator, was responsible for processing all Career Education Inventory data. As was stated earlier, all data was initially processed by the University of Washington Bureau of Testing. Both pre- and post-test results were obtained from that source.

Both pre- and post-test data then for each group were combined and summarized. The analysis of covariance was subsequently performed on all data utilizing a Monroe Model 1860 Programmable Calculator. This program requires only the hand input of matched pairs of data with all calculations and operations being completely automated after initial entry of scores. Dr. Martin was subsequently responsible for analysis and interpretation of the test results.

PART II--Effectiveness/Success (cont.)

Objective No. 1

5. Provide statistical evidence that the objective was attained at or above the criterion level(s) established for that objective.

Present Evidence:

A. Grade Three Career Education Inventory

Table VIII presents the results of the analysis for the third grade students in Project Future. The pre-test mean for the 22 experimental students was 27.91 compared to the post-test mean for the same group of 36.31. The 34 control students obtained a pre-test mean of 30.73, while their post-test mean was 33.44. The analysis of co-variance in this case yield an F ratio of 29.84, which again is significant at the .001 level.

Table VII Results of analysis of co-variance for 3rd grade control and experimental groups on the Career Education Inventory for the 1975-76 school year.

	N	Pre-test Mean	Post-test Mean	df	Mean Square	F
Experimental	22	27.91	36.31	Adjusted Means 1	308.42	
Control	34	30.73	33.44	Within Groups 53	10.33	29.84*

* P <.001

Thus the third grade students who participated in Project Future instruction again demonstrated significant statistical gain as measured by the Career Education Inventory when compared against the third grade control students who did not receive such instruction.

B. Grade Six Career Education Inventory

Results of the Analysis of Co-variance for the sixth grade students are seen in Table VIII. A pre-test mean for the 41 students in the experimental classes was 29.36 while the pre-test mean for the 54 control students was 30.05. The post-test means were 37.49 for the experimental group and 34.18 for the control group. After adjusting for any initial differences, the analysis of co-variance yielded an F ratio of 14.59, which is significant at the .001 level.

Again, the conclusion is that the students participating in the sixth grade experimental Project Future classrooms obtained significant statistical gain as measured by the Career Education Inventory.

Table VIII Results of analysis of co-variance for the sixth grade control and experimental groups on the Career Education Inventory for the 1975-76 school year.

	N	Pre-test Mean	Post-test Mean	df	Mean Square	F
Experimental	41	29.36	37.49	Adjusted Means 1	351.63	
Control	54	30.05	34.18	Within Groups 92	24.09	14.59*

* P < .001

C. Grade Nine Career Education Inventory

Table IX presents the results of the analysis co-variance for the ninth grade students. As can be seen, the pre-test mean for the 36 students in the experimental classes was 25.6 compared to a pre-test mean for the control students of 25.5. The experimental students showed a post-test mean of 37.5 while the control group obtained a post-test mean of only 26.7. After adjusting for any initial differences the analysis of co-variance yielded an F ratio of 142.42 which is significant at the .001 level of significance.

Again, these results would strongly suggest that a result of the instructional intervention the experimental students were able to demonstrate significant improvement on the extent of knowledge and skills as measured on a career education inventory when contrasted to a control students who did not have such instruction.

Table IX Results of analysis of co-variance for ninth grade control and experimental groups on the Career Education Inventory for the 1975-76 school year.

	N	Pre-test Mean	Post-test Mean	df	Mean Square	F
Experimental	36	25.6	37.5	Adjusted Means 1	2973.10	
Control	91	25.5	26.7	Within Groups 124	20.87	142.42*

* P < .001

D. Grade Twelve Career Education Inventory

The results of the analysis of co-variance for the twelfth grade students from the Career Education Inventory are seen in Table X. The pre-test mean for the 53 students in the experimental classes were 32.9. While the pre-test mean for the 95 control students was 32.7. The pre-test means compared to post-test means from the inventory of 42.2 for the experimental students and 33.5 for the control students. After the initial pre-test means were statistically adjusted to allow for any slight initial differences, an approximated 10-point gain was obtained for the experimental students. The control group of students showed only a .9 degree of change from pre- to post-test.

Tests yielded an F ratio of 111.48 which is significant at the .001 level. Thus, one can very safely conclude that the experimental students had significant statistical gain on the career education inventory above and beyond that obtained by the control students.

Table X Results of analysis of co-variance for twelfth grade control and experimental groups on the Career Education Inventory for the 1975-76 school year.

	N	Pre-test Mean	Post-test Mean	df	Mean Square	F
Experimental	53	32.9	42.2	Adjusted Means 1	2451.59	
Control	95	32.7	33.5	Within Groups 145	21.99	111.48*

* P < .001

E. Sixth, Ninth, and Twelfth Grade Interpersonal Communications

Table XI Results of analysis of co-variance of "Positive Non Verbal" section of interpersonal communications component for 6th, 9th and 12th grade students for the 1974-75 school year.

Grade	Group Average Responses Per Minute			
	N	Pre-test	Post-test	Adjusted Post-test
6th				
Experimental	6	.183	.317	.318
Control	6	.233	.183	.183
9th				
Experimental	18	.278	.350	.348
Control	6	.433	.300	.292
12tn				
Experimental	12	.092	.325	.330
Control	6	.083	.117	.122

SOURCE	Analysis of Co-variance Table			
	Residual Sum of Squares	df	Mean Square	F
Between				
Treatment	.1890	1	.1890	8.00**
Grade	.0529	2	.0265	1.12
Interaction	.0468	2	.0234	.99
Within (error)	1.1111	47	.0236	

** $p < .01$

The first section of the Interpersonal Communications skills instrument is the Positive Non-Verbal category that has been previously mentioned. See Part II, section 4(f), 3. Table XIV presents the results of the analysis for the sixth, ninth, and twelfth grade students included in both experimental and control groups. The first portion of Table XIV presents the pre- and post-test means in terms of average responses per minute for each of the grade levels and

groups. The adjusted post-test mean for each group is also presented. The second part of Table XI is the analysis of co-variance data which allows one to determine whether the difference between groups was significant.

The analysis of co-variance table shows that the difference between the experimental and control groups did yield an F of 8.0 which is significant at a level greater than .01. The differences between grades and interaction F ratios were not significant. Therefore, it is possible to say that the effect of treatment for all grades was to produce a difference in favor of the experimental students. In summary, in terms of the increasing of positive non-verbal skills, experimental groups demonstrated a more significant gain than did the controls.

Table XII Results of analysis of co-variance of "Group Process Facilitation" section of interpersonal communications component for 6th, 9th, and 12th grade students for the 1974-75 school year.

Grade	Group Average Responses Per Minute			
	N	Pre-test	Post-test	Adjusted Post-test
6th				
Experimental	6	.150	.467	.532
Control	6	.333	.267	.260
9th				
Experimental	18	.289	.372	.383
Control	6	.283	.400	.413
12th				
Experimental	12	.450	.350	.298
Control	6	.317	.183	.183

SOURCE	Analysis of Co-variance Table			
	Residual Sum of Squares	df	Mean Square	F
Between				
Treatment	.1575	1	.1575	2.13
Grade	.2497	2	.1248	1.69
Interaction	.1637	2	.0819	1.11
Within (error)	3.4780	47	.0740	

TableXIII presents a similar analysis for the Group Process Facilitation section of the interpersonal communications component. Inspection of the first part of TableXIII will show the pre- and post-test average responses per minute for each of the grades and for the respective experimental and control groups. The adjusted post-test mean for each group is also presented, against which the final analysis is made. The lower part of TableXIII presents the analysis of co-variance table. The obtained F for each of the between-group comparisons was not significant in any case. The F of 2.13 for the treatment comparison was not significant nor was the F for grade or total interaction.

Therefore, the analysis indicates that a significant difference was not obtained between experimental and control groups as a result of treatment or intervention in relation to group process facilitation skills.

Table XIII Results of analysis of co-variance of "Individual Participation" section of interpersonal communications component for 6th, 9th and 12th grade students for the 1974-75 school year.

Grade	Group Average Deviation Score			
	N	Pre-test	Post-test	Adjusted Post-test
6th				
Experimental	6	.933	.700	.527
Control	6	.250	.417	.544
9th				
Experimental	18	.583	.444	.425
Control	6	.317	.483	.581
12th				
Experimental	12	.583	.383	.364
Control	6	.433	.717	.763

SOURCE	Analysis of Co-variance Table			
	Residual Sum of Squares	df	Mean Squares	F
Between				
Treatment	.3052	1	.3052	5.80*
Grade	.0309	2	.0154	.29
Interaction	.2467	2	.1233	2.34
Within (error)	2.4742	47	.0526	

* $p < .05$

Table XIII presents the analysis of the Individual Participation section of the interpersonal communications component. The total participation score is arrived at somewhat differently than other scores included in the battery and subsequently a deviation score is established for each individual in the group, as opposed to a direct recording of responses per minute. See Part II, section 4(i), 1b for further details concerning this scoring formula.

The first part of TableXIII presents the average deviation scores for each of the grades and each of the groups within the grades for both pre-test and post-test performances, as well as the adjusted post-test score. The latter part of Table XIII presents an analysis of co-variance table. From that table it is evident that the F of 5.80 obtained for the treatment effect was significant at .05 level. The F obtained for other between-group comparisons of grade and total interaction was not significant. Therefore, it can be said that the effects of treatment intervention on the experimental groups was significant in improving the total participation score for the experimental students. In this case, since the scores were deviation scores, it meant a reduction in the deviation scores was the favorable direction for the data.

Table XIV Results of analysis of co-variance of "Group Process Deterrents" section of interpersonal communications component for 6th, 9th and 12th grade students for the 1974-75 school year.

Grade	Group Average Responses Per Minute			
	N	Pre-test	Post-test	Adjusted Post-test
6th				
Experimental	6	.167	.117	.120
Control	6	.017	.283	.323
9th				
Experimental	18	.133	.111	.123
Control	6	.417	.233	.177
12th				
Experimental	12	.258	.067	.048
Control	6	.117	.150	.166

Table cont. page 37G

Table XIV presents the results of the analysis of co-variance for the Group Process Deterrents section of the interpersonal communications component. Since the communication behavior here is of a negative nature the desired direction of the data would be a decline. In other words, over the course of the treatment, the students should be exhibiting fewer group process deterrent behaviors.

SOURCE	Analysis of Co-variance Table			
	Residual Sum of Squares	df	Mean Square	F
Between				
Treatment	.1738	1	.1738	4.13*
Grade	.0889	2	.0445	1.06
Interaction	.0365	2	.0183	.43
Within (error)	1.9767	47	.0421	
* $p < .05$				

The respective means for the pre- and post-test performances of each group are presented in the first portion of Table XIV . In each case it can be seen that the experimental group declined a favorable direction from the pre- to post-test, whereas the control group increased in two cases and decreased in one case. The latter part of Table XIV presents the analysis of co-variance which shows that the effects of treatment on the results yielded an F ratio of 4.13 which was significant at the .05 level.

The F ratio obtained for differences attributed to grade and for interaction between treatment and grade were not significant. Therefore, it can be said that the experimental group of students did decrease the pre- to post-testing to a significant degree when compared to the respective group of control students. Also it can be said that this was true across all grades and that there were no significant differences in the degreee of difference between or among any of the grades.

Table XV Results of analysis of co-variance of "One Way Statement" section of interpersonal communications component for 6th, 9th and 12th grade students for the 1974-75 school year.

Grade	Group Average Responses Per Minute			
	N	Pre-test	Post-test	Adjusted Post-test
6th				
Experimental	6	.00	.00	.012
Control	6	.00	.250	.262
9th				
Experimental	18	.028	.00	.007
Control	6	.083	.550	.547
12th				
Experimental	12	.175	.083	.065
Control	6	.083	.083	.081

Table cont. page 37H

Table XV (cont.)

SOURCE	Analysis of Co-variance Table			
	Residual Sum of Squares	df	Mean Square	F
Between				
Treatment	.8056	1	.8056	69.57***
Grade	.3638	2	.1819	15.71**
Interaction	.5627	2	.2814	24.30**
Within (error)	.5443	47	.0116	
** $p < .001$				

Table XV presents the results of the One-way Statement section of the interpersonal communications component. Again, this section reflects a negative communication skill. Therefore it is desirable that the students achieve lower scores over the course of treatment.

The first portion of Table XV presents the average responses per minute for each of the groups in each of the grade levels. The sixth grade experimental group did not have any one-way statements on either the pre- or post-test. The control group at the sixth grade level had an average of 0 responses on the pre-test, but increased to an average of .25 on the post-test.

Again, the ninth grade experimental group went from an average of .028 on the pre-test to 0 one-way statement responses on the post-test observation compared to their comparable control group which went from .083 on the pre-test to .55 on the post-test, which was an increase in the less desirable direction for the control group.

The twelfth grade experimental group decreased the number of one-way statements over the course of pre- to post-testing, whereas the control group remained at the same average for both testings.

The analysis of co-variance is shown in the second part of Table XV There was a significant difference in the treatment effect which yielded an F ratio of 69.57, significant at a level greater than .001. This suggests that, as a result of the intervention, the experimental group achieved a response rate significantly different from the control group.

However, a significant F of 15.71 was also obtained for the analysis within grades. This suggests that the sixth grade results were different from the ninth grade results, which in turn were different from the twelfth grade results. In short, each grade was different from each of the other two grades in terms of the results.

Furthermore, the F obtained from the interaction effect between treatment and grade was also significant, being 24.30.

In summary, these results are a little more difficult to interpret because the treatment, grade, and interaction between treatment and grade were all significant.

In summary, it can be said there was a significant treatment effect in comparing the experimental group with the control group. However, there was also a differenceamong the grades and there appeared to be an interaction effect between treatment and grade. An example of this would be that the result of treatment appeared to be more effective at the sixth grade than at the twelfth grade, although all comparisons between experimental and control groups were significant. However, additional analysis of the data must be carried out before the previous statement could be said with assurance. Because of the low or 0 averages in a couple of the groups, a very high difference is obtained. All that can be said at this point is that the treatment effect was significantly present, and that there was also an interaction between the extent of the treatment effect and the grade level at which it occurred.

Table XVI Results of analysis of co-variance of "Confusion" section of interpersonal communications component for 6th, 9th and 12th grade students for the 1974-75 school year.

Grade	Group Average Responses Per Minute			
	N	Pre-test	Post-test	Adjusted Post-test
6th				
Experimental	6	.400	.00	.004
Control	6	1.233	2.00	1.99
9th				
Experimental	18	.567	.400	.402
Control	6	1.00	1.10	1.096
12th				
Experimental	12	.950	.050	.047
Control	6	.083	.500	.507

Table cont. page 37J

SOURCE	Analysis of Co-variance Table			
	Residual Sum of Squares	df	Mean Square	F
Between				
Teatment	12.0952	1	12.0952	1118.48**
Grade	3.6417	2	1.8209	168.38**
Interaction	3.7296	2	1.8648	172.44**
Within (error)	5.0825	47	1.0814	
** $p < .001$				

Table XVI presents the results of the analysis for the Confusion Section of the interpersonal communications component. Again, the Confusion category is a negative communication phenomenon, therefore the desirable direction would be for a reduction of the occurrence of confusion in a group.

Inspection of the first part of Table XVI shows that the experimental groups in each grade did in fact reduce the average amount of confusion present, whereas in each case the control group increased the amount of confusion from the pre- to post-testing.

The second part of Table XVI presents the analysis of co-variance which shows that for treatment, grade, and interaction all three F values were highly significant, resulting in P's of .001 or higher.

These results are very similar to the One-way Satement results described earlier in that the effects of treatment were significant with an F of 1118.48, a very high F ratio. There were also significant differences among the grades, but it cannot be said from this analysis which grade was in fact more significant than other grades. Also, there was a significant interaction effect between grade and treatment effect. This is to say that the effects of treatment varied with the grade level, but again, further analysis is required to determine at which grade the treatment was most effective. It can be said, however, that there was significant reduction in the amount of confusion within each of the experimental groups, but there was no reduction with the corresponding control groups of students.

Table XVII summarizes results for the Negative Non-verbal section of the interpersonal communications component. The first part of the table shows the three grades and the control and experimental group averages for each of those grades. Again, the negative non-verbal behavior is a negative phenomenon in communication activities and therefore, the desired direction on the data would be to decrease the

amount of negative non-verbal behavior in a discussion. In each of the grades the experimental group of students decreased the amount of negative non-verbals while the amount of negative non-verbal behavior in the control groups increased in each case.

Table XVII Results of analysis of co-variance of "Negative Non-Verbal" section of interpersonal communications component for 6th, 9th and 12th grade students for the 1974-75 school year.

Grade	Group Average Responses Per Minute			
	N	Pre-test	Post-test	Adjusted Post-test
6th				
Experimental	6	.367	.167	.094
Control	6	.117	.300	.332
9th				
Experimental	18	.194	.117	.115
Control	6	.283	.417	.377
12th				
Experimental	12	.167	.092	.102
Control	6	.033	.100	.168

SOURCE	Analysis of Co-variance Table			
	Residual Sum of Squares	df	Mean Square	F
Between				
Teatement	.3742	1	.3742	14.35**
Grade	.0945	2	.0472	1.81
Interaction	.0906	2	.0452	1.74
Within (error)	1.2259	47	.0261	

** $p < .001$

The analysis of co-variance, which is the second part of Table XVII shows that the F ratio of 14.35 obtained for the treatment between group analysis was significant at a level greater than .001. The F ratios found for grade and interaction were not significant. Therefore the results are fairly clear in that the effect of the treatment across all grades was beneficial. The experimental groups performed

better as a result of the treatment than did the control groups. There was no interaction or difference in performance between the grades and no interaction between treatment and grade.

In general the results of the entire interpersonal communications component were positive. All sections of the observational procedure produced positive treatment effects except for Group Process Facilitation. With the exception of this one area, it can be said that Project Future intervention activities were beneficial in bringing about the desire direction of improvement in appropriate communication skills.

PART II--Effectiveness/Success (cont.)

Objective No. 1

6. In addition to previously cited statistical evidence provide evidence of educational significance of the reported findings.

Present evidence:

A. Many contemporary authors have supported as educationally sound the content and activities which have become part of the project's instructional program. Dr. James Spradley[1] refers to students having career information, career experience, and contact with career models as essential preliminaries to career decision making and skills training. Super[2] has written that, "Exploration is more relevant than training", as a result of his studies of the process of occupational selection. Hoyt, Evans, and Mangum[3] describe fifteen career exploration activities which are useful in orienting students to the concepts of work, employment, job satisfaction, career choice, and other related understandings. In one form or another, almost all of these are found in the project's activities.

Numerous other research findings and articles could be quoted to support the program which has been developed by the project. One has only to survey current educational journals, books, magazines, and newspapers to note the high priority given to career education throughout the nation. The project responded to this national emphasis by involving students in learning about the work.

B. The amount of teacher attention which the project has generated in the district emphasizes the concern which professionals hold for career education. Likewise, area teachers, counselors, and administrators have expressed interest in the project through visitations to the project's office and classes, attendance at inservice courses sponsored by the project staff. Data concerning these are on file with the project. Again, this professional interest in career education on a national and regional basis provides evidence of the educational significance of the project.

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[1]Spradley, James P., "Career Education in Cultural Perspective", Essays on Career Education, (Portland, Oregon: Northwest Regional Educational Laboratory, 1973).

[2]Super, Donald E., "Vocational Development Theory: Persons, Positions, and Processes." The Counseling Psychologist, (1969), vol. I.

[3]Evans, Rupert N., Hoyt, Kenneth B., Mangum, Garth L., Career Education in the Middle/Junior High School, (Salt Lake City: Olympus Publishing Co., 1973) p. 102.

C. Responses of secondary students their parents, and cooperating employers also support the learning which is provided in the ninth and twelfth grade pilot classes. As can be seen in Tables XVIII, XIX & XX, those who responded to the questionnaires which were sent to the three groups felt that the program had educational value.

Table XVIII Percentages of employer responses to Occupational Observation Experience (OOE) program questionnaire, Spring, 1975

Questions	N	Rating Scale 0 No, None, Never	1 A little, Seldom	2 Some Sometimes	3 Considerable, Often	4 Yes, All Always
1. Students learned about work	69	--	4.35	30.43	40.58	24.64
2. Time was adequate	67	4.48	10.45	26.87	29.85	28.36
3. Students were able to be involved	72	22.22	20.83	27.78	12.50	16.67
4. Students met employers expectations	68	-	7.35	14.71	17.65	60.29
5. a) Scheduling adequate	63	-	-	6.35	14.29	79.37
b) Information adequate	47	-	4.26	-	14.89	80.85
6. Any benefit to you	65	26.15	13.85	23.08	12.31	24.62
7. Value of this approach	61	1.64	8.20	13.11	44.26	32.79

Table XIX Percentages of Grade Nine and Twelve parent responses to Occupational Experience (OOE) Questionnaire, Spring, 1975

Questions	Answers	Percentage by Grades			
		9 N=37	12 N=18	9 or 12 N=6	Total N=61
Aware of P.F. Involvement?	Yes	100.00	88.89	100.00	89.72
	No	-	5.56	-	1.64
	No Resp.	-	5.56	-	1.65
Reaction to statements concerning OOE's*	Statement a	75.68	77.78	100.00	78.69
	b	-	-	-	-
	c	37.84	50.00	66.67	44.26
	d	5.41	-	-	-
	e	72.97	61.11	83.33	70.49
	No Resp.	-	5.56	-	1.64
Value of Information	Scale 0 (low)	-	-	-	-
	1	8.11	5.56	-	6.56
	2	24.32	27.78	33.33	26.23
	3	48.65	38.89	50.00	45.90
	4 (high)	18.92	16.67	16.67	18.03
	No Resp.	-	11.11	-	3.28
Attitude toward Occupation	Scale 0 (low)	-	-	-	-
	1	10.81	-	-	6.56
	2	13.51	22.22	16.67	16.39
	3	40.54	22.22	50.00	36.07
	4 (high)	35.14	44.44	33.33	37.70
	No Resp.	-	11.11	-	3.28

*Statements to which parents were asked to react - one or more could be checked.
a - It was an excellent way for my child to learn about jobs.
b - It took him/her out of school too much.
c - It gave him/her an experience which will influence his/her life.
d - It seems to have been a waste of time for him/her.
e - We talked a lot about each observation afterwards at home.

TABLE XX Summary of student questionnaire responses, Grade 9 and 12 pilot classes, Spring 1975.

(Note: Percentages are shown only for two highest* and two lowest** responses on a 5-point scale. Complete table is on file at project office.)

ITEM	(N=111) Gr. 9 Percentage		(N=26) Grade 12 Percentage		(N=137) Total	
	High*	Low**	High*	Low**	High*	Low**
1. Is there a need for career education?	90%	01%	96%	---	91%	01%
2. Rating of class activities:						
a) O.O.E.'s	85	03	92	---	87	02
b) Field trips, tours	50	07	65	---	53	06
c) Class speakers	63	06	44	04%	60	06
d) Films	62	12	54	19	61	13
e) Newspaper use	37	21	32	16	36	20
f) Career World	32	17	22	15	30	16
g) Textbooks	41	17	37	26	40	19
h) Interviewing	48	09	56	--	49	07
i) Interpersonal Commun.	62	07	41	--	57	05
j) Personal budgeting	32	09	58	12	47	10
k) Career info./research	65	08	71	--	66	07
l) Class discussions	66	07	58	08	64	07
m) Self-awareness	61	06	62	--	61	05
n) Decision-making	63	05	52	--	61	04
o) Economics	38	11	35	12	37	11
p) Applications/resumes	52	09	60	08	53	09
3. Average reaction to O.O.E.'s	32	07	37	05	33	06
4. How much information about occupations was gained in this class?	77	06	73	04	76	06
5. How well prepared are you for the next career step?	75	06	77	04	76	05
6. Did you learn more about yourself?	66	12	58	15	64	13
7. Was the class well organized?	76	06	77	--	77	05
8. What is your personal reaction to the class?	75	06	81	--	76	04

D. The Bremerton School District has pledged to continue the program at all grade levels during the next year using local funds. See Part IV, Section 2 and 3 for supportive evidence. Most of the cooperating employers with whom the program has been working during the past four years have enthusiastically agreed to continue. These examples of program support are evidence of the educational importance attached to the project and its activities by educators and the community.

E. The ability to communicate effectively with others is a skill which is of considerable value in acquiring and fulfilling an occupational assignment. Teaching these interpersonal skills in a systematic and measurable way has been a problem little dealt with in public education. Also, a strategy for gathering empirical data regarding such skills acquisition has been lacking.

For most students and adults, opportunities to assist group interactions are many in school, work, home, and other settings. Such skills are expected to reduce the "people problems" which frequently limit personal success in working situations.

The nine-lesson unit of instruction developed by the project appears to accomplish this instructional objective for sixth, ninth, and twelfth grade students, and the evaluation system which the project staff created seems to measure the application of the learning. From an institutional perspective, this is a significant educational accomplishment.

F. Student reports of learning derived from the on-site observations of occupations provide evidence of the usefulness of this form of information gathering. Emphasis on the student's feelings about the work being observed has particular educational value because it allows them to use their personal values in reacting to the pro's and con's of the occupation. Copies of these observations are on file at the project office.

PART II--Effectiveness/Success (cont.)

Objective No. 1

7. State the conclusions which were drawn from the results reported.

State conclusions:

The results as reported herein indicate that the goal and objective of Project Future have been met by the instructional program which was designed and implemented by the project. It is concluded that the project can meet the standards set down by the validation procedure and can stand as a model career education program for the benefit of students in other school systems.

PART III--RESOURCE SPECIFICATIONS

Resource Specifications: Sufficient information is provided concerning needed start-up, operational and management resources in kind and amount which, when combined with Part II, Effectiveness/Success, and Part IV, Exportability data, will help an interested school district make an informed decision about adoption/adaption of the project practice.

Directions: In providing financial information for the validation of the practice, and for potential adopters, please follow the usual format of Title III budget listing:

100	Administration
200	Instruction
300	Attendance Services
400	Health Services
500	Pupil Transportation
600	Operation of Plant
700	Maintenance of Plant
800	Fixed Charges
900	Food Services
1000	Student Body Activities
1100	Community Services
1200	Sites, Remodeling, Construction
1300	Capital Outlay, Equipment

Within each line, list specific numbers and positions, e.g.,

200	Instruction
201	3 teachers (10 Months)
202	1 guidance counselor (10 months)
203	1 reading resource teacher (10 months)

PART III--RESOURCE SPECIFICATIONS

Introduction

Adopters of educational practices and products are keenly interested in the kinds and amounts of resources required for the initiation or start-up of a new program and in the resources necessary for on-going operation and management. Because costs for personnel and material differ from district to district and because some districts may have more resources which can be reassigned than other districts, adopters are interested in required resources for adoption rather than developer costs. For these reasons Part III is intended to provide the specifications of the types and quantities of resources necessary for successful adoption of a practice or of parts of a practice. From this information potential adopters can estimate their individual costs for start-up, operation and management.

Directions

The form which follows (p. 43) is to be used in specification of the resources needed in the adoption of a practice. If the practice can be adopted in parts, these parts should be identified and data provided for each. The objectives which are met by each part of the practice should be identified also. Before preparing the form the producer should include a brief explanation of the basic organizational unit in which the practice functions and for which the resources are specified. Given the resource specifications for one unit of intervention an adopter can determine his own cost for installing multiple units of the practice. "Unit of Intervention" refers to the basic organizational unit in which intervention with learners is provided, e.g., a classroom, a media center, a school district. Two examples of the type of explanation needed follow. Note that the number of learners within the basic unit of intervention and the duration of the intervention is also provided.

Example 1: An "intensive instructional program for high risk learners" may be installed within a specialized classroom at grade one. The specialized classroom is designed for 20 high risk first graders. Intervention occurs for 4.5 hours per day for 180 school days per year.

Example 2: A "media center extension program" is designed for middle school instructional support for 750 students in grades 5-8. Intervention is provided for three hours per student per week for 30 weeks in each school year.

Once the applicant has defined the basic unit of intervention he should then determine and specify the types and amounts of resources required

PART III--RESOURCE SPECIFICATIONS (cont.)

for one unit of the program. Resource specifications should be established for three aspects of program adoption:

1. Start-up Costs are any allowable costs that an adopter would incur (on a one-time basis only) to begin program operations necessary to carry out the program to be adopted.

2. Operational Costs are the day to day expenditures related to carrying out the instructional program for the learner.

3. Management Costs cover administrator services for all aspects of a program.

The learner objective(s) which are met by the practice should be listed at the top of the form provided on p. 43. In using the form the applicant must list required resources indicating type and quantity under the broad Federal budget headings: e.g. 100--Administration, 200--Instruction, etc. More than one form will be required if the practice can be adopted in parts, i.e., in a project dealing with a broad range of pupil personnel services, different treatments for different target populations might be offered.

Project expenditures associated with writing curricula or developing instructional materials, refining educational methods, and performing research activities are considered developmental costs and are not to be reported under start-up costs (or under any other category).

PART III--Resource Specifications and Cost Estimation

Resource by Type and Amount

Objectives addressed by the practice:

1. - Project has only one objective
2. -
3. -

Unit of Intervention PRIMARY (3 classes), 30 students and one teacher per class.

1/	START-UP COSTS		MANAGEMENT COSTS		OPERATIONAL COSTS	
ITEM	PRODUCER	ADOPTER*	PRODUCER	ADOPTER*	PRODUCER	ADOPTER*
Resource listing by Federal Code (see page 40; use only those budget items appropriate to the specific practice.)	This program may be used in all 1-12 classrooms either by being integrated with other subject matter or as a separate subject. The costs described herein do not include teachers' salaries . If relevant materials, equipment, or services are already available, they need not be duplicated. Some costs for the 1-12 program (such as consultants for in-service) are prorated for each Unit of Intervention.					
200 INSTRUCTION						
211 Salary of Principals Program In-service Training for principal, 5 days @ $70 including employee benefits (Prorated 50%)	$ 175	$	$	$	$	$
213 Salaries of Teachers Program In-service training for 3 teachers, 40 hours @ $5.50 including employee benefits.	660					
215 Salaries of Clerical Assistants 180 Days x 2 hrs. @ $3.75, including employee benefits. Helping teachers with student activities.					1,350	
Total	$	$	$	$	$	$

*This is to be used by Potential adopters to estimate costs; producer leaves these columns blank.

1/ Do not include developmental costs.

PART III--Resource Specifications and Cost Estimation

Resource by Type and Amount

Unit of Intervention PRIMARY (continued)

1/ ITEM	START-UP COSTS		MANAGEMENT COSTS		OPERATIONAL COSTS	
	PRODUCER	ADOPTER*	PRODUCER	ADOPTER*	PRODUCER	ADOPTER*
	$	$	$	$	$	$
230 Library & Audio visual Materials						
Assorted Career Awareness library books	200					
240 Instructional Supplies						
Duplicating materials					25	
250 Other Expenses for Instruction						
2 Duso Kits $90	180					
1 Valuing Approach to Career Education K-2	360					
1 Valuing Approach to Career Education 3-5	485					
1 Focus on Self Development Stage One	135					
1 Focus on Self Development Stage Two	150					
500 PUPIL TRANSPORTATION SERVICES						
520 Contracted Services						
Field Trip expenses					250	
1200 CAPITAL OUTLAY						
1230 Equipment for Instruction						
2 Filmstrip Viewers and Cassette Players-$170	340					
Total	$2,685	$	$	$	$1,625	$

*This is to be used by Potential adopters to estimate costs; producer leaves these columns blank.

1/ Do not include developmental costs.

1/ If a teacher is added

PART III--Resource Specifications and Cost Estimation

Resource by Type and Amount

Objectives addressed by the practice:

1. - Project has only one objective
2. -
3. -

Unit of Intervention INTERMEDIATE (3 classes), 30 students and one teacher per class.

ITEM	1/ START-UP COSTS PRODUCER	START-UP COSTS ADOPTER*	MANAGEMENT COSTS PRODUCER	MANAGEMENT COSTS ADOPTER*	OPERATIONAL COSTS PRODUCER	OPERATIONAL COSTS ADOPTER*
	$	$	$	$	$	$
200 INSTRUCTION						
211 Salary of Principals						
Program in-service training for principal, 5 days @ $70 including employee benefits (prorated 50%)	175					
212 Salaries of Consultants						
In-service instruction for teachers						
-Interpersonal communications 1 day @ $160 (prorated 33.3%)	53					
-4 half days @ $80 (prorated 33.3%) interpersonal communications follow-up			107			
-Newspaper in a classroom 1 day @ $150 (prorated 33.3%)	50					
213 Salaries of Teachers						
Program in-service training for 3 teachers, 40 hours each @ $5.50 including employee benefits	660					
215 Salaries of Clerical Assistants						
180 days x 2 hours @ $3.75 including employee benefits. Helping teachers with student activities.					1,350	

PART III--Resource Specifications and Cost Estimation

Resource by Type and Amount

Unit of Intervention INTERMEDIATE (continued)

ITEM 1/	START-UP COSTS		MANAGEMENT COSTS		OPERATIONAL COSTS	
	PRODUCER	ADOPTER*	PRODUCER	ADOPTER*	PRODUCER	ADOPTER*
	$	$	$	$	$	$
230 Library & Audio-visual materials						
Assorted Career Awareness library materials	250					
2 Handbooks of Job Facts - $7	14					
1 Occupational Outlook Handbook - $7	7					
1 set Economics in the Home, School and Community - $325	325					
1 set (Westinghouse) Our Values, Our Society, Our Economy-$180	180					
240 Instructional Supplies						
Duplicating materials					25	
30 Newspaper in the classroom 10 weeks @ .35 each					105	
250 Other Expenses for Instruction						
3 Widening Occupational Roles Kits - $200	600					
1 Focus on Self Development Stage 3 - $150	150					
3 Occupational Outlook Handbook - $7	21					
1 Secrets Kit - $90	90					
30 Student Booklets-.90					27	
1 Jelly Bean Factory Kit Parts I and II - $200	200					
500 PUPIL TRANSPORTATION SERVICES						
520 Contracted Services						
Field trip expenses					250	

PART III--Resource Specifications for Cost Estimation

Resource by Type and Amount

Unit of Intervention INTERMEDIATE (continued)

1/ ITEM	START-UP COSTS PRODUCER	START-UP COSTS ADOPTER*	MANAGEMENT COSTS PRODUCER	MANAGEMENT COSTS ADOPTER*	OPERATIONAL COSTS PRODUCER	OPERATIONAL COSTS ADOPTER*
	$	$	$	$	$	$
1200 CAPITAL OUTLAY						
1230 Equipment for Instruction						
2 filmstrip viewer and cassette player - $170	340					
Total	$3,115	$	$ 107	$	$1,757	$

*This is to be used by Potential adopters to estimate costs; producer leaves these columns blank.

1/ Do not include developmental costs.

PART III--Resource Specifications and Cost Estimation

Resource by Type and Amount

Objectives addressed by the practice:

1. - Project has only one objective
2. -
3. -

Unit of Intervention SECONDARY (6 classes) 30 students and one teacher per class

1/ ITEM	START-UP COSTS PRODUCER $	START-UP COSTS ADOPTER* $	MANAGEMENT COSTS PRODUCER $	MANAGEMENT COSTS ADOPTER* $	OPERATIONAL COSTS PRODUCER $	OPERATIONAL COSTS ADOPTER* $
200 INSTRUCTION						
212 Salaries of Consultants						
In-service instruc- for teachers:						
-Interpersonal communications, 1 day @ $160 (prorated @ 66.7%)	107					
-4 half days @ $80 (prorated @ 66.7%) interpersonal communications follow-up			213			
-Newspaper in a classroom 1 day @ $150 (prorated @ 66.7%)	100					
213 Salaries of Teachers 2/						
Program in-service training for 6 teachers, 40 hours each @ $5.50 including employee benefits	1,320					
215 Salaries of Clerical Assistants						
Teacher aide time:						
-20 days x 6 hrs. @ $3.75 including employee benefits to establish community contacts for work observations	450					
-160 days x 4 hrs. @ $3.75 including employee benefits to schedule work observations for students					2,400	

PART III--Resource Specifications and Cost Estimation

Resource by Type and Amount

Unit of Intervention SECONDARY (continued)

ITEM	1/ START-UP COSTS PRODUCER $	START-UP COSTS ADOPTER* $	MANAGEMENT COSTS PRODUCER $	MANAGEMENT COSTS ADOPTER* $	OPERATIONAL COSTS PRODUCER $	OPERATIONAL COSTS ADOPTER* $
220 Textbooks						
60 copies Manpower Economic Education - $5	300					
230 Library & Audio-visual material						
Assorted Occupational Information materials; briefs, booklets, pamphlets, etc.	300				100	
15 subscriptions Career World - $3.25					49	
1 Occupational Outlook Handbook - $7	7					
1 Dictionary of Occupational Titles - $15	15					
240 Teaching Supplies						
90 Newspaper in the classroom 15 weeks @ .35 each					473	
Mimeo paper and supplies					250	
Postage					75	
250 Other Expenses for Instruction						
3 Career Games - $85	255					
1 set Dictionary of Occupational Titles-$15	15					
2 Life Career Games-$35	70					
1 Set Maturity: Growing Up Strong	80					
6 Occupational Outlook Handbook - $7	42					
3 Widening Occupational Roles Kits - $200	600					
500 PUPIL TRANSPORTATION						
520 Contracted Services						
Miscellaneous pupil transportation					100	

PART III--Resource Specifications and Cost Estimation

Resource by Type and Amount

Unit of Intervention SECONDARY (continued)

ITEM	1/ START-UP COSTS		MANAGEMENT COSTS		OPERATIONAL COSTS	
	PRODUCER	ADOPTER*	PRODUCER	ADOPTER*	PRODUCER	ADOPTER*
	$	$	$	$	$	$
600 OPERATION OF PLANT						
640 Telephone 10 months @ $75					750	
Total	$3,661	$	$ 213	$	$ 4,197	$

*This is to be used by Potential adopters to estimate costs; producer leaves these columns blank.

1/ Do not include dvelopmental costs.

PART III--Resource Specifications and Cost Estimation

Resource by Type and Amount

Objectives addressed by the practice:

1. - Project has only one objective
2. -
3. -

Unit of Intervention: SECONDARY WORK INTERN PROGRAM (SUMMER) 150 Students, one teacher/supervisor

ITEM 1/	START-UP COSTS		MANAGEMENT COSTS		OPERATIONAL COSTS	
	PRODUCER	ADOPTER*	PRODUCER	ADOPTER*	PRODUCER	ADOPTER*
	$	$	$	$	$	$
200 INSTRUCTION						
212 Supervisor of students' activities in salary 8 weeks x $425, including employee benefits					3,400	
215 Teacher Aide's Salary 8 weeks x 30 hrs. x $3.75 including employee benefits - assists supervisor in clerical details and student placement					900	
240 Teaching Supplies -Office and program materials and supplies					100	
-Postage					40	
250 Travel Expenses for Instruction 2000 miles @ $.13					260	
600 OPERATION OF PLANT						
640 Telephone 2 months @ $75					150	
Total	$	$	$	$	$ 4,850	$

*This is to be used by Potential adopters to estimate costs; producer leaves these columns blank.

1/ Do not include developmental costs.

Comments and Explanations concerning Resource Specifications and Cost Estimation Data.

The units of intervention for the program are broken down as Primary, Intermediate, Secondary, and Summer Work Intern Program. Although this suggests that the program can operate with some independence at any level, all cost data is based on a continuous grade 1 through 12 program in which teachers from all levels receive in-service training as a single group.

Many of the costs are based upon the assumptions that materials and other resources will be shared among classes, and that basic classroom operating supplies are available in the regular school program. Only expenditures which are considered to be essential for the operation of the program at each level are included.

It is possible that adopting schools will have some of the material or resources included in this program. In that case, there is no need to duplicate the expenditures, thereby reducing the cost of installing the program.

The following is a brief commentary concerning the expenditure items listed on the preceding pages:

1. Teacher workshop participants' costs are shown at the workshop rate which has been stipulated by the project district's negotiated contract. This could vary considerably in adopting schools.

2. The Primary and Intermediate units include a salary or stipend for a principal to attend the in-service training. This is important as, in most elementary schools, the principal has some involvement in the instructional program. In order for him/her to be aware of the teachers' and students' activities, and also to allow him the greatest opportunity to assist the teachers, the principal is strongly urged to take part in this training.

3. The use of consultants and their costs will vary depending on the needs of the teachers in the adopting school. In the case of this project, training in the teaching of interpersonal communications was considered essential, and a one day instructional program followed by several short visits with teachers during the school year accomplished this training.

   The other consultant was used during the summer in-service workshop to orient teachers to numerous ways of using the newspaper for career education instruction with intermediate and secondary students. Although it might seem to be a rather simple learning activity, teachers who wish to include this segment of the project would benefit from the experience of others who have worked with it.

If project staff can provide assistance to an adopting school system, some or all of the consultant costs would be reduced or eliminated.

4. Teacher aides are included at all levels. A minimum of time, approximately two hoursper school day, is included for the Primary unit and for the Intermediate unit. It is assumed that teacher aides would perform supportive duties in conjunction with the project activities. Teacher aides are very useful for working with small groups of students either in or out of the classroom as the emphasis of the program is on student involvement in short or long range projects.

   At the Secondary unit, teacher aides are essential to the process of having students assigned for occupational observations. It is suggested that the aide time be concentrated at the start of the project in order to make a large number of contacts with community resources. Once this has occurred, the routine of assigning students to particular employers will require most of the teacher aide's allotted time.

5. The materials which are listed in support of the program for each unit of intervention are considered to be those which have the greatest value to this type of program for a particular grade level. This is not to suggest that alternative materials would not be useful, or that a larger quantity of materials would not permit greater flexibility. Rather, the materials listed represent the minimum resources in order to have the program start. Where expenditures are shown as operational costs in this category, it is expected that these items would either be consumable or would add to the basic collection of materials on a year-by-year basis.

6. The only pieces of equipment required are filmstrip viewers and cassette players for use with several of the specified materials. Today, most schools are equipped with these devices, and this may be a cost which would not be required for an adopting school.

7. It is essential that a telephone be readily available to the teacher aides in the secondary program as it will be necessary to call employers in setting up student observations.

8. Pupil transportation is provided for elementary grades in the program. Small groups are encouraged to visit work sites, frequently traveling by automobile with a volunteer parent or a teacher aide. Reimbursement for mileage is provided. A limited number of short bus trips are provided for in the budget.

   At the secondary level, students are expected to provide their own transportation as they go out on a more individual basis to observe various occupations. In a few cases students will require financial assistance to accomplish this, and in the past the project has provided bus fare, ferry fare, and other small amounts of money to make it possible for all students to participate in this activity. Again, small groups may occasionally travel by auto to a special work site or program, and mileage allowance is provided.

9. The summer Work Intern Program includes cost data based upon setting up a typical program. Figures for this reflect the project district's rates, but are not based upon the actual costs of this program during the past year. Inasmuch as it was the first year of the program and the number of students was unknown in advance, two supervisors were hired. It turned out that one supervisor could have handled up to 150 students over the six-week period, and costs are projected based on this ratio. A teacher aide is included to assist with clerical activities, and to cover the office while the supervisor is making student on-site visits.

Travel expenses are for on-site supervision of interns

PART III--Resource Specifications by Category

Directions: If the practice can be adopted in parts the parts should be identified and data provided for each.

Unit of Intervention: PRIMARY (3 classes), 30 students and 1 teacher per class

1. Present data on costs of the following:

	Start-up Costs	Management Costs	Operational Costs
a. Staff Development Salaries paid for in-service for 3 teachers. 40 hrs. each @ $5.50, plus ½ of principal's salary of $70/day.	$ 835	$	$
b. Materials Library books and classroom kits and programs.	1,510		25
c. Facilities Regular school classrooms and other facilities were used at no additional cost.			
d. Contracted services Field trips: a) mileage allowances for private cars, 1000 @ .13 mile = $130 b) bus use = $120			250
e. Equipment (purchase) audio-visual	340		
f. Travel Paid as contracted service			
g. Other - Teacher aides' salaries, 360 hrs. @ $3.75			1,350

PART III--Resource Specifications by Category

Unit of Intervention: PRIMARY (continued)

	Start-up Costs	Management Costs	Operational Costs
	$	$	$
h. Total the start-up, operational and management columns to obtain the total cost of the practice.	2,685	-	1,625
i. Give total number of learners upon which costs were based.	90	-	90
j. Divide i into h and derive per learner costs for each column. To find continuation costs add operating costs to those management costs related to operations.	$ 29.83	-	$ 18.06

PART III--Resource Specifications by Category

Directions: If the practice can be adopted in parts the parts should be identified and data provided for each.

Unit of Intervention: INTERMEDIATE (3 classes), 30 students and 1 teacher per class

1. Present data on costs of the following:

	Start-up Costs	Management Costs	Operational Costs
a. Staff Development Salaries paid for in-service training for 3 teachers, 40 hrs. each @ $5.50/hr; plus ½ of principal's salary of $70/day	$ 835	$	$
b. Materials Library books and classroom kits and programs	1,837		157
c. Facilities Regular school classrooms and other facilities were used at no additional cost			
d. Contracted services: 1) Consultant salaries (prorated shares) for interpersonal communication training and for newspaper in a classroom share. 2) Consultant salary (prorated share) for classroom assistance in interpersonal communications. 3) Field trips: a) mileage allowance for private cars, 1000 mi. @ .13/mile = $130. b) Bus use = $120	103[1.]	107[2.]	250[3.]
e. Equipment (rental, purchase) audio-visual	340		
f. Travel Paid as contracted service			
g. Other: Teacher aides' salaries, 360 hrs. @ $3.75			1,350

PART III--Resource Specifications by Category

Unit of Intervention: INTERMEDIATE (continued)

		Start-up Costs	Management Costs	Operational Costs
h.	Total the start-up, operational and management columns to obtain the total cost of the practice.	$ 3,115	$ 107	$ 1,757
i.	Give total number of learners upon which costs were based.	90	90	90
j.	Divide i into h and derive per learner costs for each column. To find continuation costs add operating costs to those management costs related to operations.	$ 34.61	$ 1.19	$ 19.52

PART III--Resource Specifications by Category

Directions: If the practice can be adopted in parts the parts should be identified and data provided for each.

Unit of Intervention: SECONDARY (6 classes), 30 students and 1 teacher per class

1. Present data on costs of the following:

	Start-up Costs	Management Costs	Operational Costs
a. Staff Development Salaries paid for in-service training for 6 teachers, 40 hrs. each @ $5.50/hr.	$ 1,320	$	$
b. Materials Library materials and classroom kits, textbooks, programs, and reference material	1,684		947
c. Facilities Regular school classrooms and other facilities were used at no additional cost.			
d. Contracted services 1) Consultant salaries (prorated shares) for interpersonal communication training and for newspaper in a classroom share. 2) Consultant salary (prorated share) for classroom assistance in interpersonal communications. 3) Field trips and other student travel costs related to observing work.	207[1]	213[2]	100[3]
e. Equipment (rental, purchase) no special equipment was required			
f. Travel, paid as contracted service.			
g. Other: Teacher aides: 120 hrs. @ $3.75	450		
640 hrs. @ $3.75			2,400
Telephone: 10 months @ $75	77		750

PART III--Resource Specifications by Category

Unit of Intervention: SECONDARY (continued)

	Start-up Costs	Mangement Costs	Operational Costs
h. Total the start-up, operational and management columns to obtain the total cost of the practice.	$ 3,661	$ 213	$ 4,197
i. Give total number of learners upon which costs were based.	180	180	180
j. Divide i into h and derive per learner costs for each column. To find continuation costs add operating costs to those management costs related to operations.	$ 20.34	$ 1.18	$ 23.32

PART III--Resource Specifications by Category

Directions: If the practice can be adopted in parts the parts should be identified and data provided for each.

Unit of Intervention: SUMMER WORK INTERN PROGRAM, 150 students & 1 supervisor

1. Present data on costs of the following:

	Start-up Costs	Mangement Costs	Operational Costs
	$	$	$
a. Staff Development (Staff training workshops excluding materials and curriculum development sessions.) Estimate number and length of sessions and the number of staff members participating in each session. Include the part of salaries paid during staff development sessions.			
b. Materials Office materials used in preparing forms, postage			140
c. Facilities Regular school office facilities were used at no additional cost			
d. Contracted Services No contracted services were used			
e. Equipment (rental, purchase) No special equipment was required.			
f. Travel: Supervisor's auto used for 8 weeks for on-site student assignment and supervision, 2000 @ .13			260
g. Other: Teacher aides:			900
Telephone: 2 months @ $75			150
Summer salary			3,400

PART III--Resource Specifications by Category

Unit of Intervention: SUMMER WORK INTERN PROGRAM (continued)

	Start-up Costs	Management Costs	Operational Costs
	$	$	$
h. Total the start-up, operational and management columns to obtain the total cost of the practice.			4,850
i. Give total number of learners upon which costs were based.			150
j. Divide i into h and derive per learner costs for each column. To find continuation costs add operating costs to those management costs related to operations.			$ 32.33

PART IV--EXPORTABILITY

A validated practice is exportable if (1) it is feasible to transport it to other school districts and (2) it can be adopted or adapted by other school districts with similar needs and environments. Used interchangeably with portable, replicable, and communicable. However, in this section questions 1-13 will be judged in terms of completeness of response. Only questions 14 & 15 on the validation section on pages 102 and 103 of the On-Site Validation section require value judgments in terms of a project's viability for dissemination

1. Provide in the space below a description of the need for this project in other districts. (The purpose of this question is to determine the potential number of adopters for your program. You might include interest already shown in your project, results of State needs assessments, etc.) If the project can be adopted in part, the documentation of evidence should substantiate this for each applicable component.

The Fifth Annual Gallup Poll of Public Attitudes Toward Education[1] states "Few proposals receive such overwhelming approval today as the suggestion that schools give more emphasis to a study of trades, professions, and businesses to help students decide on their careers. Nine in 10 persons in all major groups samples in this survey say they would like to have the schools give more emphasis to this part of the educational program."

The above quote serves to emphasize the interest which exists nationally in providing career education for today's students. It is logical to assume that schools in the State of Washington would have a similar interest, and in fact, that interest can be documented. Letters on file from Mr. Richard Lutz, Coordinator of Career Education for the State, Mr. A.G. Breslin of the Statis Coordinating Council for Occupational Education, and Dr. Donald Wentworth, Director, Washington State Council for Economic Education attest to the growing emphasis being given to career education in the State's public schools.

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[1]Elam, Stanley,ed. The Gallup Polls of Attitudes Toward Education 1969-1973. (Bloomington: Phi Delta Kappa, Inc. 1973) p. 163.

Examination of data [2] from 1973 and 1974, and projections through 1978 indicate that career education is expanding as a public school offering throughout the State. Data show that 23 percent of the elementary students had some form of career education in 1973 but that steady yearly increases will raise this to 68 percent by 1978. Figures for the same time period for grades 7-9 are 38 percent and 72 percent respectively, and 39 percent and 57 percent respectively for grades 10-12. Thus, potential adopters at all levels appear to exist throughout the State.

The facts that, for the past three years, the State of Washington has considered career education to be a major priority for the public school curriculum, and that a full-time coordinator was appointed by the Superintendent of Public Instruction, suggest a need for model programs which may be disseminated throughout the State. As school districts review their curricula, career education is expecteded to be a high priority.

Courses based on the project's activities were developed and sponsored by the project and offered in Bremerton and attracted teachers from at least seven other area school districts. One of these courses has been offered as a summer school program at Pacific Lutheran University and at Eastern Washington State College. This demonstrates that the interest of teachers in career education is growing in the State of Washington.

Because this project operated on a grade 1 through 12 basis, it has developed a program which can be installed at all grade levels. At the same time, the program can be adopted in parts for any grade level if that suits a particular school situation. All exportation efforts as a result of validation can be geared to the needs and readiness of an interested school staff, so that adaptation either in parts or in total can be accomplished. This is expected to increase the interest level of potential adopters.

It is difficult at this time to predict the specific numbers of teachers or school districts who will be potential adopters of this project. The current financial support problems in the state may or may not be resolved in the near future, and depending on the solutions, school districts may be reluctant to engage in new expenditures on any large scale.

At the same time, it is expected that there always will be a group of teachers and administrators in every school district who will have the professional determination to find ways of improving the educational opportunities for their students. Given the flexibility and relatively low expense levels of this program, plus the enthusiastic public support which it can generate, career education, programming may well be in considerable demand within our state during the coming year.

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[2] Brennan, Bruce, A Picture of Vocational Education In The Common Schools (K-12) of Washington State 1966-1979, (Olympia, Office of the Superintendent of Public Instruction, 1974) p.11

PART IV--Exportability (cont.)

2. Will the learner activities be continued with State or local funds? (Other than ESEA Title III)

YES X NO ___

Report evidence:

The Bremerton School District has included in its 1976-77 preliminary budget a total of $10,562 in local funds to operate the project program at the same general level as this year. The following number of students at various program levels will be served: 135 primary, 135 intermediate, 140 junior high, 300 high school (150 FTE), and 135 Work Intern Program. This is a total of 845 students, or 695 full time equivalent, based on the two high schools operating a total of five one-semester classes.

PART IV--Exportability (cont.)

3. If the project is validated, and funded for dissemination, is the Board of Education willing to operate the project as a demonstration site (i.e., accept the role as a producer school. See definition.).

YES X NO ___

Report evidence:

On page 116 of this report the Superintendent of the Bremerton School District, Dr. Thornton M. Ford, has indicated by his signature the willingness of the District to operate the project as a State or National project demonstration site. Inclusion of District funds for program operation in the District budget is a further indication of this intent. By its approval of the budget, the District's Board of Directors (i.e. Board of Education) provides evidence of its commitment to make the program available as a demonstration model.

PART IV--Exportability (cont.)

4. Provide in the space below a detailed description of the target population (e.g., age, ethnic composition, income level, teacher experience, family, urbnn/rural).

Description:

This project has importance to all grade 1 through 12 students, assuming that all students will have future roles as productive citizens in our society. At the secondary levels, the program may have slightly more value to a student who does not have a clearly identified career goal, but all students should benefit by learning about themselves and about the process for identifying or realigning career, and indeed, life goals.

PART IV -- Exportability (cont.)

5. Summarize in the chart below the learner involvement in the program you feel necessary for an adopter to obtain similar results.

Learner Involvement

Classroom Activities			Check Appropriate Box	
	Regular School Day		After School [X]	Summer [ ]
Grade	Hours per session	Sessions per year	Hours per session	Sessions per year
Pre-K				
1] 2] 3]	Program is integrated within school day and subjects. Students should have at least an average of two hours per week for project program activities during the school year.			
4] 5] 6]	Program is integrated within school day and subjects. Students should have at least an average of two and a half hours per week for project program activities during the school year.			
7] 8]	daily 45-50 minute class period	180	may include 1-8 hours non-school time for occupational observations.	1-4
9	daily 50-55 minute class period	1 semester 90	" "	1-4
10] 11]	" "	" "	" "	1-4
12	" "	" "	" "	1-4

Directions:
1. Complete a chart for each separate component which directly involves the learner.
2. If involvement varies from student to student, give the typical range.
3. Add explanatory notes on the back of the chart if necessary for clarity.

PART IV--Exportability (cont.)

5. Summarize in the chart below the learner involvement in the program you feel necessary for an adopter to obtain similar results.

Learner Involvement

Summer Work Intern Program

	Regular School Day		After School [ ]	Summer [X]
Grade	Hours per session	Sessions per year	Hours per session	Sessions per year
Pre-K				
1				
2				
3				
4				
5				
6				
7				
8				
9			minimum of 112 ½ hours working time required to complete program for credit for each session	one or two three-week sessions per summer
10				
11				
12				
Adults				

Directions:
1. Complete a chart for each separate component which directly involves the learner.
2. If involvement varies from student to student, give the typical range.
3. Add explanatory notes on the back of the chart if necessary for clarity.

PART IV--Exportability (cont.)

6. Describe the nature of the institutional variables (e.g., the school administration, teaching staff, physical facilities) which you feel would be critical to the success of the project in an adopting district.

Description:

Most important among the institutional requirements for the successful introduction of a career education program is a commitment from the teachers who are to be involved and from the administrators who are in supervising relationship with the teachers. Because students may spend some time away from the school building, teachers and administrators must be willing to acknowledge that a) all learning does not have to occur within the sacred walls of a school, b) students can learn responsibility by being trusted to discover about occupations while on their own, and c) students may even make some mistakes in their independent study but should be given another chance to succeed.

This involves school policy and a philosophical set which may vary among teachers, administrators, or schools. However, a preliminary discussion of the implications of this policy or philosophical differences will at least identify what student activities are possible within the program and the level of commitment with which teachers and administrators start into the program.

Teacher experience does not appear to be a factor in working with this program. The project has included teachers who are in their first year as well as those who have more than twenty years of experience. The most important characteristic for the teacher to be successful in this program may be a sincere interest in current and future societal problems, a general understanding of the economic system in which work takes place, and a sensitivity to interpersonal relations, especially the communications element and the process of decision making.

Teacher aides who are selected for secondary programs will be most effective if they have some background or contact with employers in the community and if they can articulate the purposes and details of having students spend a work shift observing a worker. Likewise, they should have typing skills, good organizational ability, and be able to work without detailed supervision.

No facilities other than those found in most schools are required for this program. It may be helpful at times to have space for elementary students to engage in group work activities or projects, but often a classroom, hallway, gymnasium, or even a courtyard can be used satisfactorily. Likewise, some classes may wish to use tools for production purposes, but usually these can be supplied by parents for temporary use.

PART IV--EXPORTABILITY (cont.)

7. Describe any community and home involvement critical to the success of the project (e.g., the necessity for parental and community participation, etc.).

Description:

This project has a strong community involvement component. The occupations and workers in any community become potential learning resources to students at all levels, and especially for the secondary program students. Any work which is legal and morally acceptable to the teacher, student, and parents is legitimate as an occupational model for this career education project. Of course, the students should be considerate of the employers' needs, and in fact, attempt to provide some type of assistance or reinforcement in exchange for the services which the students are receiving. Contact with the employers should be handled in an organized and business-like manner, with advance notice and follow-up student reports provided. The participating community resources are also an important source of program evaluation data.

Parental involvement may be included in some cases as community participation. In addition, parents should be informed in some detail concerning the nature and goals of the career education program, and the specific activities in which their student may be engaged. All scheduled out-of-school learning should have the prior approval of the parents. Finally, parents should be encouraged to stimulate and support students' learning in this program by sharing information about the parents' occupations. Each student will gather impressions informally concerning work done by parents, but often these impressions can be more valid if the job information is discussed in detail.

PART IV--Exportability (cont.)

8. Describe clearly and precisely the activities critical to the success of the project. These should be the project elements of your program which would have to be installed in another district for you to recognize the program as an adoption. If your project can also be adopted in part based on the separate objectives, cluster your responses by objective. Briefly discuss the pros and cons of partial adoption vs. full adoption of the program.

Description:

A. Elements Which are Critical For Program Adoption.

1. Primary, (Grades 1, 2, 3)
Classroom activities should be included which stress a) self-understanding and the interrelationships between people, b) that everyone has personal and group values which govern behavior and choices which people make, and c) that our way of life is based upon young people and adults making economically productive contributions to their own and society's well-being.

Opportunities should be provided for students to observe people working at a broad variety of occupations, and students should be able to talk with workers about their jobs. Finally, some form of group productivity in which students perform a number of tasks in the process of making and/or distributing goods or services should be included.

Many opportunities for group discussions should be available to reinforce the students' learning.

2. Intermediate (Grades 4, 5, 6)
The emphases on interpersonal relationships, communications, and the growth of each student's individual personality, interests, and values are critical elements at this level. Continued study of work in general and of occupations having specific student interest are also important. Many basic economic principles will be encountered as the students explore the interdependence of occupations in this age of specialization and mass production. Societal problems such as unemployment, management and labor conflicts, inflation and recession, welfare, and the quality of life should be dealt with at this level.

Training in the use of resources to gather occupational information also should occur in the later intermediate grades. How to observe an occupation and interview workers is taught and practiced at this level.

Formation of a class money-earning project should take place with intermediate students so that division of labor and other phenomena associated with operating a production enterprise can be experienced.

3. Lower Secondary (Grades 7, 8, 9)
Students should have opportunities to identify their own values. Where any students find conflicts, help should be provided so that they can establish a clearly understood and personally acceptable set of values and priorities. Interpersonal communications and effective group participation skills should be developed.

The exploration of a variety of occupations in one or more fields of interest should be intensified. Students should be given opportunities to study two or more jobs by observing workers at their tasks during at least one full work shift. A system of collecting occupational data from these observations should be taught so that information can be compared for two or more jobs.

Continued exploration of work as an essential part of our social and economic system should take place in the classroom. The concepts of freedom of occupational choice as well as realistic constraints on that freedom, should be introduced. Occupational information acquisition should be linked to an understanding of personal values, interests, skills, strengths, and limitations. This linkage can be the study of a process for making decisions.

4. Upper Secondary (Grades 10,11, 12)
Decision making skills should be applied to planning for a post-high school activity. The identification of one or more fields of occupation interest should be narrowed to the point where a plan for entering a selected career field can be developed by each student. This plan would include further post-high school training and education, if required or desired.

The school program should encourage students to spend three or more days with different workers as they do their jobs. This should include observing different jobs within a field of interest, and students should be encouraged to compare the pros and cons of several occupations. Each student should learn to express this judgment in terms of individual personal values. In this way the ultimate selection of a career will reflect the student's thoughtful decision on the basis of a personal commitment.

Continued training in interpersonal communications and group activities should take place.

Students should have opportunities for work experience. The concept of a work internship gives students a chance to learn how to work, how to accept responsibility, and how to interact with adults in a working environment. A minimum of three weeks of full-time experience in each of one or more jobs will provide a valuable introduction to employment.

B. Partial vs. Full Adoption

1. As indicated in Part IV, section 6, the critical institutional condition is the staff's commitment to the goals of the project. Therefore, full adoption for grades 1 through 12 would be most desirable in a school district if the staff at all levels were aware and enthusiastically supportive of the program. If this is not the case, it would seem most useful to install the program at a level which has such a ready staff.

2. If cost is the only factor in deciding where to start the program, making the initial investment in upper secondary students, followed in order by lower secondary, intermediate, and finally, primary levels might be argued. This would allow those who are closest to needing the information and skills to have the first opportunity to gain them.

3. A major advantage of total program installation is the effect on a community and a school staff when a program develops at all levels simultaneously. There may develop a new level of esprit de corps among the school personnel as they share their successes and enthusiasm. As the community becomes involved, there will be numerous opportunities to have "total school" type functions and community activities such as work fairs or student-operated community projects. The more completely the school system is involved, the more value these community-based program elements can have.

PART IV--Exportability (cont.)

9. List essential materials, on the chart below, (software) used by students, teachers, and others and the source. Cost figures for items listed should be included in the Resource Specifications Section. List the source of the materials. Review these in terms of the previously determined critical program elements.

Directions: Identify user by checking appropriate column.
If checking other column specify the user.

Essential Materials**

PRIMARY UNIT

Type of Materials	User			Quantity* Per Unit	Source***
	Student	Teacher	Others		
Assorted Career Awareness library books	X			50-60	Any library supplier
Developing Understanding of Self and Others	X			2	Guidance Associates Pleasantville, NY 08629
Teacher's Guide		X		1	
Valuing Approach to Career Education K-2	X			1	Education Achievement Corp. 6420 N.E. Halsey Street Portland, OR 97213
Teacher's Guide		X		1	
Valuing Approach to Career Education 3-5	X			1	Education Achievement Corp. 6420 N.E. Halsey Street Portland, OR 97213
Teacher's Guide		X		1	
Focus on Self Development Stage One	X			1	SRA 259 East Erie Street Chicago, IL 60611
Teacher's Guide		X		1	

*Describe the unit you are using for a particular quantity. Example: 1 (teacher's guide) per teacher, 10 (tapes) per class of 25.

**Complete a chart for each project component if the project can be adopted in parts.

***For materials only available from the local project discuss the availability of these by potential adopters.

PART IV--Exportability (cont.)

9. List essential materials, on the chart below, (software) used by students, teachers, and others and the source. Cost figures for items listed should be included in the Resource Specifications Section. List the source of the materials. Review these in terms of the previously determined critical program elements.

Directions: Identify user by checking appropriate column.
If checking other column specify the user.

Essential Materials**

PRIMARY UNIT (cont.)

Type of Materials	User			Quantity* Per Unit	Source***
	Student	Teacher	Others		
Focus on Self Development Stage Two	X			1	SRA 259 East Erie Street Chicago, IL 60611
Teacher's Guide		X		1	
Project Future Career Education Activities		X		1	Project Future Bremerton School Dist. Bremerton, WA 98310
Duplicating Materials		X			Any school or office supplier
Ditto Masters				1 box	
Ditto Paper				1 case	
Duplicating Fluid				2 gal.	

PART IV--Explortability (cont.)

9. List essential materials, on the chart below, (software) used by students, teachers, and others and the source. Cost figures for items listed should be included in the Resource Specifications Section. List the source of the materials. Review these in terms of the previously determined critical program elements.

Directions: Identify user by checking appropriate column.
If checking other column specify the user.

Essential Materials**

INTERMEDIATE UNIT

Type of Materials	User			Quantity* Per Unit	Source***
	Student	Teacher	Others		
Assorted Career Awareness library books	X			will vary 40--60	Any library supplier
Handbook of Job Facts	X			2	SRA 259 East Erie Street Chicago, IL 60611
Occupational Outlook Handbook	X			4	U.S. Government Printing Office Washington, DC 20402
Economics in the Home, School and Community	X			1	Aimes Instructional Media Services, Inc. P.O. Box 1010
Teacher's Guide		X		1	Hollywood, CA 90028
Our Values, Our Society, Our Economy	X			1	Westinghouse Learning Corp. 100 Park Avenue
Teacher's Guide		X		1	New York, NY 10017
Widening Occupational Roles Kit	X			3	SRA 259 East Erie Street
Teacher's Guide		X		1	Chicago, IL 60611
Focus on Self Development Stage 3	X			1	SRA 259 East Erie Street
Teacher's Guide		X		1	Chicago, IL 60611

*Describe the unit you are using for a particular quantity. Example: 1 (teacher's guide) per teacher, 10 (tapes) per class of 25.

**Complete a chart for each project component if the project can be adopted in parts.

***For materials only available from the local project discuss the availability of these by potential adopters.

PART IV--Explortability (cont.)

9. List essential materials, on the chart below, (software) used by students, teachers, and others and the source. Cost figures for items listed should be included in the Resource Specifications Section. List the source of the materials. Review these in terms of the previously determined critical program elements.

Directions: Identify user by checking appropriate column.
If checking other column specify the user.

Essential Materials**

INTERMEDIATE UNIT (cont.)

Type of Materials	User			Quantity* Per Unit	Source***
	Student	Teacher	Others		
Secrets Kit	X			1	Educational Progress Corp.
Teacher's Guide		X		1	4900 South Lewis
Student Booklets				30	Tulsa, OK 74145
Jelly Bean Factory Kit Parts I & II	X			1	BFA Educational Media 909 N.E. Linden
Teacher's Guide		X		1	Hillsboro, OR 97123
Project Future Career Education Activities		X		1	Project Future Bremerton School Dist. Bremerton, WA 98310
Newspaper in the classroom (10 wks.)	X			30	Seattle Post Intelligencer 521 Wall Street Seattle, WA 98121
Duplicating materials					
Ditto Masters				1 box	
Ditto Paper				1 case	
Duplicating Fluid				2 gal.	

PART IV--Explortability (cont.)

9. List essential materials, on the chart below, (software) used by students, teachers, and others and the source. Cost figures for items listed should be included in the Resource Specifications Section. List the source of the materials. Review these in terms of the previously determined critical program elements.

Directions: Identify user by checking appropriate column.
If checking other column specify the user.

Essential Materials**

SECONDARY UNIT

Type of Materials	User			Quantity* Per Unit	Source***
	Student	Teacher	Others		
Manpower and Economic Education (textbook)	X			60	Love Publishing Co. 6635 East Villanova Denver, CO 80222
Assorted Occupational Information Materials; briefs, booklets, pamphlets, etc.	X			will vary	
Career World (monthly magazine)	X			15	Curriculum Innovations, Inc. 501 Forest Lake Avenue Highwood, IL 60040
Teacher's Guide		X		1	
Occupational Outlook Handbook	X			7	U.S. Government Printing Office Washington, DC 20402
Dictionary of Occupational Titles	X			2	U.S. Government Printing Office Washington, DC 20402
Newspaper in the classroom (15 wks.)	X			90	Seattle Post Intelligencer 521 Wall Street Seattle, WA 98121
Career Games	X			3	Educational Progress Corp. 4900 South Lewis Tulsa, OK 74145
Teacher's Guide		X		1	

*Describe the unit you are using for a particular quantity. Example: 1 (teacher's guide) per teacher, 10 (tapes) per class of 25.

**Complete a chart for each project component if the project can be adopted in parts.

***For materials only available from the local project discuss the availability of these by potential adopters.

PART IV--Explortablity (cont.)

9. List essential materials, on the chart below, (software) used by students, teachers, and others and the source. Cost figures for items listed should be included in the Resource Specifications Section. List the source of the materials. Review these in terms of the previously determined critical program elements.

Directions: Identify user by checking appropriate column.
If checking other column specify the user.

Essential Materials**

SECONDARY UNIT (cont.)

Type of Materials	User			Quantity* Per Unit	Source***
	Student	Teacher	Others		
Life Career Game	X			2	Western Publishing Co. 850 Third Avenue New York, NY 10022
Maturity: Growing Up Strong set	X			1	Scholastic Book Services 904 Sylvan Avenue
Teacher's Guide		X		1	Englewood Cliffs, NJ 07632
Widening Occupational Roles Kit	X			3	SRA 259 East Erie Street
Teacher's Guide		X		1	Chicago, Il 60611
Project Future Career Educational Activities		X		1	Project Future Bremerton School Dist. Bremerton, WA 98310
Mimeo paper and Supplies:					Any school or office supplier
Stencils			X	10 quires	
Mimeo paper			X	5 cases	
Mimeo ink			X	10 tubes	
File folders			X	400	
Name tag covers		X		3 boxes	
Ditto masters			X	2 boxes	
Ditto paper			X	2 cases	
Duplicating fluid			X	4 gal.	
Postage			X	750	U.S. Post Office

* Teacher aide

PART IV--Exportability (cont.)

9. List essential materials, on the chart below, (software) used by students, teachers, and others and the source. Cost figures for items listed should be included in the Resource Specifications Section. List the source of the materials. Review these in terms of the previously determined critical program elements.

Directions: Identify user by checking appropriate column.
If checking <u>other</u> column specify the user.

<u>Essential Materials**</u>
SECONDARY WORK INTERN PROGRAM (SUMMER)

Type of Materials	User			Quantity* Per Unit	Source***
	Student	Teacher	Others		
Office and program materials and supplies:		X		All listed materials will serve 150 students	Any school or office supplier
Stencils				3 quire	
Mimeo paper				2 cases	
Mimeo ink				4 tubes	
4 x 6 cards				200	
File folders				250	
Postage - .13¢ stamps		X		400	U.S. Post Office

*Describe the unit you are using for a particular quantity. Example: <u>1</u> (teacher's guide) <u>per teacher</u>, 10 (tapes) <u>per class of 25</u>.

**Complete a chart for each project component if the project can be adopted in parts.

***For materials only available from the local project discuss the availability of these by potential adopters.

PART IV--Exportability (cont.)

10. Describe, on the chart below, any essential equipment (hardware) and/or unique facilities required for the project for adoption and its use by activities. Cost figures for items listed should be included in the Resource Specification Section.

Essential Equipment***

PRIMARY UNIT

Type of Material	User			Quantity* Per Unit	Source
	Student	Teacher	Others**		
Filmstrip Viewer and Cassette Player	X			2	Audio-visual Corp. 6420 N.E. Halsey St. Portland, OR 97213

*Describe the unit you are using for a particular quantity ex. 1 (teacher's guide) per teacher, 10 (tapes) per class of 25.

**Identify "others".

***Complete a chart for each project component if the project can be adopted in parts.

PART IV--Exportability (cont.)

10. Describe, on the chart below, any essential equipment (hardware) and/or unique facilities required for the project for adoption and its use by activities. Cost figures for items listed should be included in the Resource Specification Section.

Essential Equipment***

INTERMEDIATE UNIT

Type of Material	User			Quantity* Per Unit	Source
	Student	Teacher	Others**		
Filmstrip Viewer and Cassette Player	X			2	Audio-visual Corp. 6420 N.E. Halsey St. Portland, OR 97213

*Describe the unit you are using for a particular quantity ex. 1 (teacher's guide) per teacher, 10 (tapes) per class of 25.

**Identify "others"

***Complete a chart for each project component if the project can be adopted in parts.

PART IV--Exportability (cont.)

10. Describe, on the chart below, any essential equipment (hardware) and/or unique facilities required for the project for adoption and its use by activities. Cost figures for items listed should be included in the Resource Specification Section.

Essential Equipment***

SECONDARY UNIT

Type of Material	User			Quantity* Per Unit	Source
	Student	Teacher	Others**		
No additional equipment is required beyond normal audio-visual equipment found in secondary schools. i.e. 16 mm movie picture, tape player, etc.					

*Describe the unit you are using for a particular quantity ex. 1 (teacher's guide) per teacher, 10 (tapes) per class of 25.

**Identify "others".

***Complete a chart for each project component if the project can be adopted in parts.

PART IV--Exportability (cont.)

10. Describe, on the chart below any essential equipment (hardware) and/or unique facilities required for the project for adoption and its use by activities. Cost figures for items listed should be included in the Resource Specification Section.

Essential Equipment***

SECONDARY WORK INTERN PROGRAM (SUMMER)

Type of Material	User			Quantity*	Source
	Student	Teacher	Others**	Per Unit	
It is assumed that a typewriter, mimeograph and other office equipment are available.					

*Describe the unit you are using for a particular quantity ex. 1 (teacher's guide) per teacher, 10 (tapes) per class of 25.

**Identify "others".

***Complete a chart for each project component if the project can be adopted in parts.

PART IV--Exportability (cont.)

11. Describe, on the chart below, the types, numbers and qualifications of personnel required to operate the project successfully. View this in terms of what another district will need to adopt your program.

Personnel*

PRIMARY UNIT (Grades 1, 2, 3)

General Type Personnel	Number in Unit **	Essential Special Qualifications	Time Involvement Per Unit
Principal (1)	1 per school	Committed to Career Education	No specified time, but personal support and involvement as appropriate is desirable
Classroom Teachers (3)	1 teacher per 30 students	Committed to Career Education; Open relationship with students	Average for school year of 2 hours per week of classroom time, plus integration with other subject matter, as appropriate
Teacher aide (1)	1 teacher aide (part-time) per 3 teachers	Able to follow teacher instruction	40 minute per day per teacher (average) for 180 days

**Describe the unit you use as a reference point. Ex. 1 (teacher) per 25-30 students, 1 (aide) per 3 teachers.

*Complete a chart for each project component if the project can be adopted in parts.

PART IV--Exportability (cont.)

11. Describe, on the chart below, the types, numbers and qualifications of personnel required to operate the project successfully. View this in terms of what another district will need to adopt your program.

Personnel*

INTERMEDIATE UNIT (Grades 4, 5, 6)

General Type Personnel	Number in Unit**	Essential Special Qualifications	Time Involvement Per Unit
Principal (1)	1 per school	Committed to Career Education	No specified time, but personal support and involvement as appropriate is desirable
Classroom Teachers (3)	1 teacher per 30 students	Committed to Career Education; Open relationship with students	Average for school year of 2½ hours per week of classroom time, plus integration with other subject matter, as appropriate
Teacher aide (1)	1 teacher aide (part-time) per 3 teachers	Able to follow teacher instructions	40 minutes per day per teacher (average) for 180 days

PART IV--Exportability (cont.)

11. Describe, on the chart below, the types, numbers and qualifications of personnel required to operate the project successfully. View this in terms of what another district will need to adopt your program.

Personnel*

SECONDARY UNIT (Grades 7-12)

General Type Personnel	Number in Unit**	Essential Special Qualifications	Time Involvement Per Unit
Classroom Teachers (6)	1 per 30 students	Committed to Career Education, Open relationship with students	1 regular class period per day for 180 days
Teacher aide (1)	1 teacher aide per 6 teachers	Able to work with minimum supervision; knows business community in general; able to meet employees in a mature and business-like manner	4 hours per day for 160 days. 6 hours per day for 20 days

PART IV--Exportability (cont.)

11. Describe, on the chart below, the types, numbers and qualifications of personnel required to operate the project successfully. View this in terms of what another district will need to adopt your program.

Personnel*

SUMMER WORK INTERN PROGRAM UNIT (Grades 9-12)

General Type Personnel	Number in Unit**	Essential Special Qualifications	Time Involvement Per Unit
Supervising teacher (1)	1 per 150 students	Committed to Work Experience as integral way of learning about occupations and employment	35-40 hours per week for 8 weeks during June/July/August
Teacher aide (1)	1 per Supervising teacher	Able to type at least 40 wpm, maintain clerical files, and take phone messages	30 hours per week for 8 weeks during June/July/August

Part IV--Exportability (cont.)

12. Describe, on the chart below, procedures and materials necessary for personnel training and technical assistance required for installation of the program in another setting.

PRIMARY UNIT (GRADES 1,2,3)	MINIMUM LEVEL OF TRAINING REQUIRED FOR A CONSUMER DISTRICT TO ADOPT EACH COMPONENT*				
Population Addressed including Number	Skills to be taught	Organization of training, including length of time i.e. after school work shop etc.	Suggested sites	Materials to be used	Follow-up Consultation
Administrators and Teachers	1. Teaching to improve self understanding and interpersonal relations. 2. Teaching about community workers. 3. Teaching about the nature of work-interdependence of jobs, etc..	Summer workshops of 40 hours duration	School or other building	Instructional materials specified for purchase; project produced lesson plans; teacher designed lessons; assorted films and filmstrips borrowed from media center.	none
Aides	none	none	none	none	none
Students (serving as personnel, not learners)	none	none	none	none	none
Parents	none	none	none	none	none
Members, Board of Education	none	none	none	none	none
Others	none	none	none	none	none

*Complete a chart for each component which can be adopted separately.

Part IV--Exportability (cont.)

12. Describe, on the chart below, procedures and materials necessary for personnel training and technical assistance required for installation of the program in another setting.

INTERMEDIATE UNIT (GRADES 4,5,6)

MINIMUM LEVEL OF TRAINING REQUIRED FOR A CONSUMER DISTRICT TO ADOPT EACH COMPONENT*

Population Addressed including Number	Skills to be taught	Organization of training, including length of time i.e. after school work shop etc.	Suggested sites	Materials to be used	Follow-up Consultation
Administrators and Teachers	1. Teaching to improve self understanding and interpersonal relations. 2. Teaching about the nature of work and the economic and social systems in which work takes place. 3. Familiarity with resources for occupational information. 4. Teaching interpersonal communication skills. 5. Teaching from a daily newspaper. 6. Teaching about values.	Summer workshop of 40 hours duration	School or other building	Instructional materials specified for purchase; project produced lesson plans; teacher designed lessons; assorted films and filmstrips borrowed from media center.	On-site visit by consultant to monitor interpersonal communications instructions.

Part IV--Exportability (cont.)

12. Describe, on the chart below, procedures and materials necessary for personnel training and technical assistance required for installation of the program in another setting.

INTERMEDIATE UNIT
(GRADES 4,5,6)

MINIMUM LEVEL OF TRAINING REQUIRED FOR A CONSUMER DISTRICT TO ADOPT EACH COMPONENT

Population Addressed including Number	Skills to be taught	Organization of training, including length of time i.e. after school work shop etc.	Suggested sites	Materials to be used	Follow-up Consultation
Aides	none	none	none	none	none
Students (serving as personnel, not learners)	none	none	none	none	none
Parents	none	none	none	none	none
Members, Board of Education	none	none	none	none	none
Others	none	none	none	none	none

Part IV--Exportability (cont.)

12. Describe, on the chart below, procedures and materials necessary for personnel training and technical assistance required for installation of the program in another setting.

SECONDARY UNIT
(GRADES 7-12)

MINIMUM LEVEL OF TRAINING REQUIRED FOR A CONSUMER DISTRICT TO ADOPT EACH COMPONENT*

Population Addressed including Number	Skills to be taught	Organization of training, including length of time i.e. after school work shop etc.	Suggested sites	Materials to be used	Follow-up Consultation
Administrators	none	none	none	none	none
Teachers	1. Teaching to improve self understanding and interpersonal relations. 2. Teaching about the nature of work and the economic and social systems in which work takes place. 3. Familiarity with resources for occupational information. 4. Teaching interpersonal communication skills. 5. Teaching from a daily newspaper. 6.Teaching about gathering occupational information by observing workers.	Summer workshop of 40 hours duration	School or other building	Instructional materials specified for purchase; project produced lesson plans; teacher designed lessons; assorted films and filmstrips borrowed from media center; materials and forms used by project to describe and implement Occupational Observation Experiences	On-site visit by consultant to monitor interpersonal communications instructions.

Part IV--Exportability (cont.)

12. Describe, on the chart below, procedures and materials necessary for personnel training and technical assistance required for installation of the program in another setting.

SECONDARY UNIT
(GRADES 7-12)

MINIMUM LEVEL OF TRAINING REQUIRED FOR A CONSUMER DISTRICT TO ADOPT EACH COMPONENT*

Population Addressed including Number	Skills to be taught	Organization of training, including length of time i.e. after school work shop etc.	Suggested sites	Materials to be used	Follow-up Consultation
Teachers (continued)	7. Teaching how to clarify values. 8. Teaching how to select, prepare for, and enter an occupation.				
Aides	Understand purpose and operation of Occupational Observation Experience program	On the job	School	Materials and forms used by project to describe and implement Occupational Observation Experiences	none
Students	none	none	none	none	none
Parents	none	none	none	none	none
Members, Board of Education	none	none	none	none	none
Others	none	none	none	none	none

Part IV--Exportability (cont.)

12. Describe, on the chart below, procedures and materials necessary for personnel training and technical assistance required for installation of the program in another setting.

SUMMER WORK INTERN PROGRAM UNIT (GRADES 9-12)

MINIMUM LEVEL OF TRAINING REQUIRED FOR A CONSUMER DISTRICT TO ADOPT EACH COMPONENT*

Population Addressed including Number	Skills to be taught	Organization of training, including length of time i.e. after school work shop etc.	Suggested sites	Materials to be used	Follow-up Consultation
Administrators	none	none	none	none	none
Teachers	Organization and supervision of students in Work Experience Programs	On-the-job	Schools or office	Materials and forms used by project to describe and implement Work Internships	none
Aides	Understand purpose and operation of Work Intern Program	On-the-job	School or office	Materials and forms used by project to describe and implement Work Internships	none
Students (serving as personnel, not learners)	none	none	none	none	none
Parents	none	none	none	none	none
Members, Board of Education	none	none	none	none	none
Others	none	none	none	none	none

Teacher Model Inservice Workshop for Career Education Preparation

The following outline of five eight-hour days of worshop time is provided as a model of the type of teacher preparation for introducing a career education program. Variations should occur based upon the identified needs and previous experiences of the adopting district's staff. It should be noted that some activities involve all personnel, while other training is designated for particular units. It is assumed that planning for classroom activities will evolve as the scheduled events occur. Final planning to start the program should be done during the last afternoon.

FIRST DAY:

Morning

Total group - Introduction:
1. What is career education - definition and discussion.
2. How can we implement this in our district?
3. What are our resources and how can they be used?
4. What are our policies and practices which would bear on a career education program?

Afternoon

Total group - Presentation and discussion of concepts which should be included in career education: presentation may include guest speakers such as union leader, State Employment Office representative, business person, etc.

SECOND DAY:

Morning

Primary Unit
Intermediate Unit - Discussion by units:
Secondary Unit

1. What do we now do upon which we can build a career education program? (List)
2. What are our needs? (List)
3. How can these needs be met? (List)

Afternoon

Primary Unit
1. Review films
2. Review materials

Intermediate Unit
1. Review films
2. Review materials: Instructional, occupational information

Secondary Unity
1. Review films
2. Review materials: Instructional, occupational information; occupational selection and and planning strategies

THIRD DAY: Morning

Primary Unit - Consider ways of teaching self awareness, values identification, and interpersonal relations to your children.

Intermediate Unit - Training for teaching Interpersonal Communications skills.

Secondary Unit - Training for teaching Interpersonal Communications skills.

Afternoon

Primary Unit

1. Consider use of materials such as DUSO, SRA Focus, Valuing Approach to Career Education, etc..
2. Review library materials.

Intermediate and
Secondary Units - Continue training from morning.

FOURTH DAY: Morning

Total Group - Review of the basic economic principles relating to the world of work.

Afternoon

Primary Unit - Review audiovisual materials which are available.

Intermediate and
Secondary Units - Using the daily newspaper to teach career education.

FIFTH DAY: Morning

Primary and
Intermediate Units - Identify community employers and work sites as in-school resources and field trips. Develop plan for their use.

Secondary Unit - Review system for using community resources for occupation observation program.

Afternoon

Total Group - Develop long-range outline and create beginning lesson plans.

Primary and
Intermediate Units - Consider sharing activities among grades/teachers.

Secondary Unit - Plan schedule of in-school special activities, and develop approach to create community awareness and interest in cooperating with career education program.

PART IV--Exportability (cont.)

13. Identify special problems (unique to this kind of project) which the adopting district might encounter in implementing the project and describe solutions. Exclude problems which will not have a bearing on the exportability of the project.

List problems and solutions:

1. Program identification. The name of this program, Project FUTURE, has an abstract relationship to career education. It was more difficult than anticipated to "sell" the program as a course at the secondary level and part of the difficulty was the project name by which the course was identified.

   A solution would be to entitle a program in an adopting school system as Career Awareness, Career Exploration, Planning Your Future, or to use some other label which would make the purpose of the program more easily understood.

2. The curriculum. At the elementary level two opposite but related situations occurred. First, some elementary teachers had difficulty in integrating the project subject matter within the regular classroom activities. Thus, they treated Project FUTURE as an "add on" or separate program, and sometimes it was not given the time or teacher attention which it required, and/or it lost continuity for the students.

   Some other elementary teachers had the opposite approach which also created a problem. Rather than identifying a specific time or content for the project, they attempted to weave it into the various subjects which were part of the regular curriculum. This often resulted in such a low profile for the project that it was difficult to identify any content or to know how much time was being spent on project activities.

   At the secondary level, scheduling made the project a separate elective class. While this gave high visibility to the program's content and time, it did not encourage integration of the subject matter with other disciplines. It also limited the number of teachers and students who were involved in the project.

   Solutions to these three problems rest with the approach taken by an adopting school system. If elementary teachers wish to develop an integrated program, they should examine

the relationship of the career education concepts to those which are included in other disciplines. Where an obvious connection can be noted, it should be capitalized upon by formal instruction which highlights the career awareness component. This will permit integration of subject matter and will provide many opportunities for reinforcement of learning.

The secondary program provides an excellent opportunity to have teachers from a variety of disciplines work together in contributing to the learning of a common set of concepts. This could happen in addition to, or in place of, having a separate course offering. The advantage of such an integrated approach would be to make career education available to most or all secondary students. The disadvantage would be that, unless there could be continuous coordination of all teachers' activities, it would be very easy to allow the program to disintegrate.

3. Inservice. While career education may appear to be a subject in which one's personal life experience can provide sufficient background for teaching, it is very apparent to those who become involved that there is not only a discrete body of knowledge connected with this subject, but also several different philosophical foundations upon which programs can be established. It is also obvious that preparation for different grade levels will vary as the content and instructional approach differs for the ages of the students. See Part II, Section 3, Table II. However, it is important to recognize that extensive inservice work must be provided to give teachers a background for dealing with issues such as manpower theory, local employment conditions, effects of the rate and direction of technological change, the economic and social factors which govern occupational opportunities, personal and group value clarification, sources of occupational information, labor and management relations, the importance of interpersonal relationships in work situations, and even the question of how one's occupation and career aspirations relate to the quality of one's life.

It is particularly important to provide teachers with an understanding of the basic principles of our economic system, as this has a direct relationship with the whole structure of employment. Likewise, instruction in interpersonal communications will be more effective if the teacher has had laboratory-type training and is sensitive to the dynamics of this type of learning. Both types of teacher training may be provided by Project FUTURE personnel, by locally selected consultants, or through several college or university courses which are available throughout the state.

Although a career education program can commence with a minimum of inservice preparation, a plan for helping teachers to gain basic understandings and background should be developed. Some of this may occur as teachers and students learn together, but it should be recognized that the teacher has the responsibility for structuring that learning and thorough teacher preparation will enhance the program for students.

4. Public Relations. This could be an area which, if overlooked, would impede the program's progress. Rather than leaving to chance the community's understanding of the purposes and practices of the adopting school system's career education program, it is suggested that a well planned approach to publicize the introduction of the program and regular reports on its progress be the responsibility of an administrator or other designated person. The purposes of such public relations are to make the community aware of what the schools are providing for students and to elicit the community's involvement in providing occupational information.

   The local newspapers, radio, and television outlets are obvious vehicles for communicating with the public. In addition, parent meetings, store displays, service organizations, and school events provide opportunities for staff and students to describe the career education program. A program or school newsletter is also effective for this purpose. It should be noted that overselling the program may be a danger, but if good judgement prevails, the program's results will speak for its effectiveness.

   A local advisory council made up of representatives from the community's business, labor, governmental, parent, and high school student groups will also facilitate the program's communication with the public. Many useful ideas may be generated by such a group, and the interest which the council will demonstrate will be reinforcing and motivating for the teachers and students.

   Finally, personal contacts by teachers with local employers and labor groups will open a two-way communication which will serve the program's needs as well as the interests of business and labor. By gaining the enthusiastic support of these groups and by including program activities which will serve their interests and meet their needs, teachers will add a new positive dimension to most school-community relationships.

5. Mechanical details. a) Record keeping is an essential part of the secondary program. Students will be leaving the school to observe workers, and the teacher aide will need to develop and maintain a file which includes available worksites and the names and dates of students who are scheduled to make visits. Carefully detailed visitation plans should be provided for the student, parent, employer, and school file for each scheduled student observation, so that all involved have the same complete information. Parent permission forms, identification badges, and a list of questions to be answered from the observation are also required for each visitation. Follow-up reports, if required by the teacher, may also become part of this record maintenance system. Models of all forms required for these purposes are available from the project.

b) Whether the secondary program is integrated or is operated as a separate course, the teachers whose classes the student will miss while observing occupations should be informed well in advance of the student's forthcoming absence. This can be accomplished by having the student obtain each teacher's signature on a form provided for this purpose. This permits the teacher to make any advance assignment for which the student will be responsible, and also allows the teacher to know what occupation is being observed. This latter information could help teachers to relate their subject matter to the student's observation experience, thereby enriching both the observation and the class work.

c) It is also important for program success for the adopting school system to check on all policies and regulations which may affect the program operation. Such matters as school insurance, high school credit for work experience, teacher aide liability, field trips, etc. should be considered. It is also important to be aware of state labor regulations for the summer Work Intern Program.

It may be important to note that the project has considered all participating students to be the responsibility of the school system, even while they are on an employer's property. The project's district provides a "hold harmless" agreement for each employer, and this has seemed to satisfy the cooperating employers.